Commonwealth of Kentucky
Environmental and Public Protection Cabinet
Department for Environmental Protection
Division for Air Quality
803 Schenkel Lane
Frankfort, Kentucky 40601
(502) 573-3382

Final

AIR QUALITY PERMIT

Issued under 401 KAR 52:020

Permittee Name:	**Kentucky Utilities Company - Ghent Station**
Mailing Address:	**PO Box 32010, Louisville, KY 40232**
Source Name:	**Kentucky Utilities Company - Ghent Station**
Mailing Address:	**PO Box 338** **Ghent, KY 41045**
Source Location:	**9485 Highway 42E, Ghent, KY 41045**
Permit ID:	**V-05-043 Revision 1**
Agency Interest #:	**704**
Activity ID:	**APE20040002**
Review Type:	**Title V, Construction / Operating**
Source ID:	**21-041-00010**
Regional Office:	**Florence Regional Office** **8020 Veterans Memorial Drive, Suite 110** **Florence, KY 41042** **(859) 525-4923**
County:	**Carroll**
Application Complete Date:	**January 7, 2005**
Issuance Date:	**October 31, 2007**
Revision Date:	
Expiration Date:	**October 31 2012**

John S. Lyons, Director
Division for Air Quality

Revised 09/29/06

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	Permit type	**Log or Activity#**	**Complete Date**	**Issuance Date**	**Summary of Action**
V-97-025	**Initial Issuance**	**E997**	**2/14/1997**	**June 17, 1998**	**Title V Initial Operating Permit**
V-05-043	**Renewal**	**APE20040002**	**1/7/2005**	**N/A**	**Renewal Draft Permit issued for Public Comment but never Finalized**
V-05-043 Revision 1	**Renewal**	**APE20040002**	**1/7/2005**	**October 31, 2007-**	**Permit Renewal with CAM Revisions and First Draft Corrections**

SECTION A - PERMIT AUTHORIZATION

Pursuant to a duly submitted application the Kentucky Division for Air Quality hereby authorizes the operation of the equipment described herein in accordance with the terms and conditions of this permit. This permit has been issued under the provisions of Kentucky Revised Statutes Chapter 224 and regulations promulgated pursuant thereto.

The permittee shall not construct, reconstruct, or modify any affected facilities without first having submitted a complete application and received a permit for the planned activity from the permitting authority, except as provided in this permit or in 401 KAR 52:020, Title V Permits.

Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by this Cabinet or any other federal, state, or local agency.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

Emissions Unit: 01 (03)* - Unit 1 Indirect Heat Exchanger
* - Emission Point 03 will be redirected to New Emission Point 25 after installation of new WFGD.

Description:
Unit 1 construction commenced before August 17, 1971.
Pulverized coal-fired, dry bottom, tangentially-fired boiler with electrostatic precipitator, wet limestone forced-oxidation sulfur dioxide scrubber, low nitrogen oxides burners, and selective catalytic reduction (SCR).
Number two fuel oil used for startup and stabilization.
Maximum continuous rating: 5500 MMBtu/hour.
Unit 1 currently vented to Point 03, and will vent to a new stack Point 25 after installation of new WFGD proposed between 2005 and 2010.

Control Equipment:
Electrostatic Precipitator (ESP)
Wet Limestone Forced-Oxidation Sulfur Dioxide Scrubber (WFGD)
Low Nitrogen Oxides Burners
Selective Catalytic Reduction (SCR)

APPLICABLE REGULATIONS:

401 KAR 61:015, Existing indirect heat exchangers (State Effective Date: April 1, 1984) applicable to an emission unit with a capacity of more than 250 MMBtu per hour and commenced before August 17, 1971
Regulation No. 7, Prevention and control of emissions of particulate matter from combustion of fuel in indirect-heat-exchangers.
401 KAR 52:060, Acid Rain Permits, incorporating 40 CFR Parts 72 to 78, Federal Acid Rain provisions.
401 KAR 51:160, NOx Requirements for Large Utility and Industrial Boilers, incorporating by reference 40 CFR 96.
40 CFR Part 75, Continuous Emissions Monitoring (CEM).
40 CFR Part 64, Compliance Assurance Monitoring (CAM, for SO2 & PM).

1. Operating Limitations:

None.

2. Emission Limitations:

a. Pursuant to 401 KAR 61:015, Section 4 (4), and Regulation No. 7, particulate emissions shall not exceed 0.20 lb/MMBtu based on a three-hour average.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

2. Emission Limitations:(continued)

b. Pursuant to 401 KAR 61:015, Section 4 (4), and Regulation No. 7, emissions shall not exceed 40 percent opacity based on a six-minute average except that a maximum of sixty (60) percent opacity is allowed for a period or aggregate of periods of not more than six minutes in any sixty minutes during building a new fire, cleaning the firebox, or blowing soot;

c. Pursuant to 401 KAR 61:015, Section 4 (4), and Regulation No. 7, emissions shall not exceed 40 percent opacity based on a six-minute average except for emissions from an indirect heat exchanger during building a new fire for the period required to bring the boiler up to operating conditions provided the method used is that recommended by the manufacturer and the time does not exceed the manufacturer's recommendations.

d. Pursuant to 401 KAR 61:015, Section 5 (1), sulfur dioxide emissions shall not exceed 5.67 lbs/MMBtu based on a twenty-four-hour average.

Compliance Demonstration Method:
To provide assurance that the particulate matter and visible emission limitations are being met, the permittee shall comply with **3. Testing Requirements** below. To provide assurance that the sulfur dioxide emissions limit is being met, the permittee shall comply with **4. Specific Monitoring Requirements** below.

3. Testing Requirements:

a. Pursuant to 401 KAR 50:045, the permittee shall submit within six months of the issuance date of the final permit a schedule to conduct a performance test for particulate compliance within one year of the issuance of this permit. This requirement may be satisfied with the successful completion of particulate matter testing performed in conjunction with PM-CEMS compliance certification/recertification when approved by the Division.

b. Testing shall be conducted in accordance with 401 KAR 50:045, Performance Tests, and pursuant to 40 CFR 64.4(c)(1), the testing shall be conducted under conditions representative of maximum emissions potential under anticipated operating conditions at the pollutant-specific emissions unit.

c. The permittee shall conduct a performance test for particulate emissions by the start of the fourth year of the term of this permit to demonstrate compliance with the applicable standard. This requirement may be satisfied with the successful completion of particulate matter testing performed in conjunction with PM-CEMS compliance certification/recertification when approved by the Division.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

3. Testing Requirements (continued)

d. If no EPA Reference Method 9 tests are performed pursuant to **4.a.ii. Specific Monitoring Requirements**, then the permittee shall determine the opacity of emissions from the stack by Method 9 at least once every fourteen (14) boiler operating days, or more frequently if requested by the Division, to demonstrate compliance with the opacity standard. If no Method 9 tests are completed during the time period, the reason for not completing a test shall be documented and the permittee may use the COM system or **4.b Specific Monitoring Requirements** , when applicable, for assuring compliance with the visible emission limitation during that period.

e. After the Unit 3 duct tie-in (to Emission Point 03) construction phase completion and again after the new stack (Emission point 25) and WFGD start-up, within sixty (60) days after achieving the maximum production rate at which the affected facilities will be operated but not later than 180 days after initial start-up of such facilities, the permittee shall conduct a performance test for particulate compliance and PM-CEMS certification/recertification on the affected facilities in accordance with 401 KAR 50:055, General Compliance Requirements.

f. After the start-up and initial certification of the PM-CEMS in Emission point 03 and again in Emission point 25, the requirement to install an opacity monitor pursuant to 401 KAR 61:005 Section 3(6)(a) will be waived with written approval from the Division pursuant to 401 KAR 61:005 Section 3(18), for alternative monitoring that utilizes the PM-CEMS. The permittee shall conduct Method 9 performance tests on each stack of at least one hour in duration, weekly for six weeks demonstrating compliance with the opacity standards. Where Method 9 tests are unable to be conducted during a week due to unit shutdown or adverse weather conditions, this shall be noted and the weekly tests resumed where suspended until a total of six tests are completed. The results of the performance tests shall be submitted along with the waiver request.

4. Specific Monitoring Requirements:

a. Pursuant to 401 KAR 61:005, Section 3, Performance Specification 1 of 40 CFR 60, Appendix B, and 401 KAR 52:020, Section 26, a continuous opacity monitoring (COM) system shall conform to requirements of these sections which include installing, calibrating, operating, and maintaining the continuous monitoring system for accurate opacity measurement. Excluding exempted time periods, if any three consecutive six-minute average opacity values exceed the opacity standard, the permittee shall, as appropriate:

i. Accept the readout from the COM as an indicator of equipment performance and perform an inspection of the COM and/or the control equipment and make any repairs or;

ii. Within thirty (30) minutes after the third consecutive COM indicated exceedance of the opacity standard, if emissions are visible, initiate a determination of opacity using Reference Method 9. Also within thirty (30) minutes after the third consecutive COM indicated exceedance, inspect the COM and/or the control equipment, and initiate any repairs. If a Method 9 cannot be performed, the reason for not performing the test shall be documented.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

4. Specific Monitoring Requirements: (continued)

b. Pursuant to 401 KAR 61:005, Section 3(18), to meet the monitoring requirement for particulate matter, and pursuant to 40 CFR 64.3(d) and the CAM plan filed on 12/11/06, the permittee shall use a particulate matter continuous emissions monitor (PM-CEMS). The PM-CEMS shall comply with Performance Specification 11 of Appendix B to 40 CFR 60 and ongoing quality assurance requirements per 40 CFR 60 Appendix F, Procedure 2. Compliance with the opacity standard shall be by Reference Method 9 and performed at least once every fourteen (14) boiler operating days. If a Method 9 cannot be performed the reason for not performing the test shall be documented.

c. At any time the PM-CEMS is considered out-of-compliance and during any construction transition period requiring the recertification of the PM-CEMS, the permittee shall monitor the ESP secondary voltages and currents pursuant to 40 CFR 64.4 as submitted in the approved CAM plan. Corrective action shall be initiated when an excursion occurs outside the indicator ranges established in the CAM plan for these parameters.

d. Pursuant to 401 KAR 61:005, Section 3 and Performance Specification 2 of Appendix B to 40 CFR 60 or 40 CFR 75, Appendix A, and 401 KAR 52:020, Section 26, continuous emission monitoring systems (CEMS) shall be installed, calibrated, maintained, and operated for measuring nitrogen oxides, sulfur dioxide, and either oxygen or carbon dioxide emissions. Excluding exempted time periods, if any 24-hour average sulfur dioxide value exceeds the standard, the permittee shall, as appropriate, initiate an investigation of the cause of the exceedances and/or the CEM system and make any repairs or take corrective actions as soon as practicable.

e. Pursuant to 40 CFR 64.3(d) and the approved CAM plan, the CEMS shall be used to satisfy CAM requirements for Sulfur Dioxide .

f. Pursuant to 401 KAR 61:015, Section 6(1), the sulfur content of solid fuels, as burned, shall be determined in accordance with methods specified by the Division.

g. Pursuant to 401 KAR 61:015, Section 6(3), the rate of each fuel burned shall be measured daily and recorded. The heating value and ash content of fuels shall be ascertained at least once per week and recorded. The average electrical output, and the minimum and maximum hourly generation rate shall be measured and recorded daily.

h. Pursuant to 401 KAR 61:005, Section 3(5), the Division may provide a temporary exemption from the monitoring and recordkeeping requirements of 401 KAR 61:005, Section 3, for the continuous monitoring system during any period of monitoring system malfunction, provided the source owner or operator shows, to the Division's satisfaction, that the malfunction was unavoidable and is being repaired as expeditiously as practicable.

i. The permittee shall monitor the duration of start-up.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

5. Specific Recordkeeping Requirements:

a. In accordance with 401 KAR 61:005, Section 3(16) (f) and 401 KAR 61:015, Section 6, the owner or operator shall maintain a file of all information reported in the quarterly summaries, with the exception that the records shall be maintained for a period of five (5) years.

b. The permittee shall maintain records of:

i. Each fuel analysis;
ii. The rate of fuel burned for each fuel type, on a daily basis;
iii. The heating value and ash content on a weekly basis;
iv. The average electrical output and the minimum and maximum hourly generation rate on a daily basis;
v. When no excess emissions have occurred and the continuous monitoring systems(s) have not been inoperative, repaired, or adjusted;
vi. Data collected either by the continuous monitoring systems or as necessary to convert monitoring data to the units of the applicable standard; and
vii. Results of all compliance tests;
viii. Percentage of the COM data (excluding exempted time periods) showing excursions above the opacity standard.

c. The permittee shall maintain records of ESP secondary voltages and currents for periods specified in the approved CAM plan and **4. c. Specific Monitoring Requirements** above and corrective actions taken. Records of these parameters shall be maintained with long-term operational records for a period of five (5) years.

d. The permittee shall keep visible observation records and Method 9 observations in a designated logbook and/or electronic format. Records shall be maintained for five (5) years.

e. The permittee shall record the duration and type (cold, warm, or hot) of a start-up.

6. Specific Reporting Requirements:

a. Pursuant to 401 KAR 61:005, Section 3 (16), minimum data requirements which follow shall be maintained and furnished in the format specified by the Division:

i. Owners or operators of facilities required to install continuous monitoring systems or those utilizing fuel sampling and analysis shall submit for every calendar quarter, a written report of excess emissions and the nature and cause of the excess emissions if known. The averaging period used for data reporting should correspond to the emission standard averaging period. All quarterly reports shall be postmarked by the thirtieth (30th) day following the end of each calendar quarter.

ii. For gaseous measurements the summary shall consist of hourly averages in the units of the applicable standard. The hourly averages shall not appear in the written summary, but shall be provided in electronic format only.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

6. Specific Reporting Requirements: (continued)

iii. The date and time identifying each period during which the continuous monitoring system was inoperative, except for zero and span checks, and the nature of system repairs or adjustments shall be reported. Proof of continuous monitoring system performance is required as specified by the Division whenever system repairs or adjustments have been made.

iv. When no excess emissions have occurred and the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be included in the report.

b. After installation and certification of the PM-CEMS, additional requirements include:

i. For particulate matter measurements, the report summary shall consist of the magnitude in actual pounds per million Btu (lb/MMBtu), rolling 3-hour average of particulate matter greater than the applicable standard for each hour of operation of the facility. Average values may be obtained by integration over the averaging period or by arithmetically averaging a minimum of four (4) equally spaced, instantaneous particulate matter measurements per hour. Any time period exempted shall be considered before determining the excess average of particulate matter.

ii. The permittee shall report the number of excursions (excluding exempted time periods) above the particulate matter standard, date and time of excursions, particulate matter value of the excursions, and percentage of the PM-CEMS data showing excursions above the applicable standard in each calendar quarter.

c. For exceedances that occur as a result of start-up, the permittee shall report:

i. The type of start-up (cold, warm, or hot);

ii. Whether or not the duration of the start-up exceeded the manufacturer's recommendation or typical, historical durations, and if so, an explanation of how the start-up exceeded recommended or typical durations.

7. Specific Control Equipment Operating Conditions:

a. The electrostatic precipitator, wet limestone forced-oxidation sulfur dioxide scrubber, low nitrogen oxides burners, and selective catalytic reduction unit shall be operated to maintain compliance with permitted emission limitations, in accordance with manufacturer's specifications and/or standard operating practices.

b. Records regarding the maintenance of the electrostatic precipitator, wet limestone forced-oxidation sulfur dioxide scrubber, and selective catalytic reduction unit shall be maintained.

c. See **Section E – Control Equipment Conditions** for further requirements.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emissions Unit: 02 (01*) - Unit 2 Indirect Heat Exchanger
* - Emission Point 01 will be redirected to Old Emission Point 03 after installation of WFGD

Description:
Unit 2 construction commenced: prior to September 18, 1978.
Pulverized coal-fired, dry bottom, tangentially-fired boiler with electrostatic precipitator and low nitrogen oxides burners.
Number two fuel oil used for startups and stabilization.
Maximum continuous rating: 5500 MMBtu/hour.
Unit 2 currently vented to Point 01 will vent to existing stack Point 03 after installation of WFGD

Control Equipment:
Electrostatic Precipitator
Low Nitrogen Oxides Burners
Wet Limestone Flue Gas Desulfurization (WFGD) units proposed for installation between 2005 and 2010

APPLICABLE REGULATIONS

401 KAR 59:015, New indirect heat exchangers of greater than 250 MMBtu/hour and commenced after August 17, 1971.
401 KAR 60:005 Section 3(b), incorporating by reference 40 CFR 60, Subpart D, Standards of performance for fossil-fuel-fired steam generators applicable for an emissions unit more than 250 MMBtu/hour and commenced after August 17, 1971.
401 KAR 52:060, Acid Rain Permits, incorporating by reference 40 CFR Parts 72 to 78, Federal Acid Rain provisions.
401 KAR 51:160, NOx Requirements for Large Utility and Industrial Boilers, incorporating by reference 40 CFR 96.
40 CFR Part 75, Continuous Emissions Monitoring (CEM).
40 CFR Part 64, Compliance Assurance Monitoring (CAM, for PM).

1. Operating Limitations:

None

2. Emission Limitations:

a. Pursuant to 401 KAR 59:015, Section 4(1)(b) and 40 CFR 60.42(a)(1) of Subpart D, particulate emissions shall not exceed 0.10 lb/MMBtu based on a three-hour average.

b. Pursuant to 401 KAR 59:015, Section 4(2) and 40 CFR 60.42(a)(2) of Subpart D, emissions shall not exceed twenty (20) percent opacity based on a six-minute average except that a maximum of twenty-seven (27) percent opacity shall be permissible for not more than one (1) six (6) minute period in any sixty (60) consecutive minutes;

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

2. Emission Limitations: (continued)

c. Pursuant to 401 KAR 59:015, Section 4(2)(c), emissions shall not exceed twenty (20) percent opacity based on a six-minute average except for emissions from an indirect heat exchanger during building a new fire for the period required to bring the boiler up to operating conditions provided the method used is that recommended by the manufacturer and the time does not exceed the manufacturer's recommendations.

d. Pursuant to 401 KAR 59:015, Section 5(1)(b) and 40 CFR 60.43(a)(2) of Subpart D, sulfur dioxide emissions shall not exceed 1.2 lbs/MMBtu based on a three-hour average.

e. Pursuant to 401 KAR 59:015, Section 6(1)(c) and 40 CFR 60.44(a)(3) of Subpart D, nitrogen oxides emissions expressed as nitrogen dioxide shall not exceed 0.70 lb/MMBtu based on a three-hour average.

Compliance Demonstration Method:
To provide assurance that the particulate matter and visible emission limitations are being met, the permittee shall comply with **3. Testing Requirements** below. To provide assurance that the sulfur dioxide and nitrogen oxides emission limitations are being met, the permittee shall comply with **4. Specific Monitoring Requirements** below.

3. Testing Requirements:

a. Pursuant to 401 KAR 50:045, the permittee shall submit within six months of the issuance date of the final permit a schedule to conduct a performance test for particulate compliance within one year of the issuance of this permit. This requirement may be satisfied with the successful completion of particulate matter testing performed in conjunction with PM-CEMS compliance certification/recertification when approved by the Division.

b. Testing shall be conducted in accordance with 401 KAR 50:045, Performance Tests, and pursuant to 40 CFR 64.4(c)(1), the testing shall be conducted under conditions representative of maximum emissions potential under anticipated operating conditions at the pollutant-specific emissions unit.

c. In accordance with **4.b Specific Monitoring Requirements**, the permittee shall submit a schedule within six months from the date of issuance of the final permit to conduct testing within one year following the issuance of this permit to establish or re-establish the correlation between opacity and particulate emissions.

d. If no additional stack tests are performed pursuant to **4.b (ii) Specific Monitoring Requirements**, the permittee shall conduct a performance test for particulate emissions by the start of the fourth year of the term of this permit to demonstrate compliance with the applicable standard. This requirement may be satisfied with the successful completion of particulate matter testing performed in conjunction with PM-CEMS compliance certification/recertification when approved by the Division.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

3. Testing Requirements: (continued)

e. If no EPA Reference Method 9 tests are performed pursuant to **4.b.i.(2) Specific Monitoring Requirements**, then the permittee shall determine the opacity of emissions from the stack by Method 9 at least once every fourteen (14) boiler operating days, or more frequently if requested by the Division, to determine compliance with the opacity standard. If no Method 9 tests are completed during the time period, the reason for not completing a test shall be documented and the permittee may use the COM system or **4.c Specific Monitoring Requirements** , when applicable, for assuring compliance with the visible emission limitation during that period.

f. After the Unit 2 duct tie-in (to Emission Point 03) construction phase completion following the Unit 3 duct tie-in (to Emission Point 03) construction phase completion and WFGD start-up, within sixty (60) days after achieving the maximum production rate at which the affected facilities will be operated but not later than 180 days after initial start-up of such facilities, the permittee shall conduct a performance test for particulate compliance and PM-CEMS certification/recertification on the affected facilities in accordance with 401 KAR 50:055, General Compliance Requirements.

4. Specific Monitoring Requirements:

a. The following monitoring requirements apply at all times:

i. Pursuant to 401 KAR 59:015, Section 7, and 401 KAR 59:005, Section 4 and 40 CFR 60.45(a) of Subpart D, continuous emission monitoring systems shall be installed, calibrated, maintained, and operated for measuring sulfur dioxide emissions, nitrogen oxides emissions and either oxygen or carbon dioxide emissions. The owner or operator shall ensure the continuous emission monitoring systems are in compliance with, and the owner or operator shall comply with the requirements of 401 KAR 59:005, Section 4 or 40 CFR 75.

ii. Pursuant to 401 KAR 59:015, Section 7(7), 401 KAR 59:005, Section 4, Performance Specification 2 of 40 CFR 60, Appendix B, 401 KAR 52:020, Section 26, and 40 CFR 64.3(d) and the CAM plan filed on 12/11/06, the CEMS shall be used to satisfy the monitoring and CAM requirements for Sulfur Dioxide and Nitrogen Oxides. Excluding exempted time periods, if any 3-hour average sulfur dioxide or nitrogen oxides value exceeds the standard, the permittee shall, as appropriate, initiate an investigation of the cause of the exceedances and/or the CEM system and make any repairs or take corrective action as soon as practicable.

iii. Pursuant to 401 KAR 59:015, Section 7(3), for performance evaluations of the sulfur dioxide and nitrogen oxides continuous emission monitoring system as required under 401 KAR 59:005, Section 4(3) and calibration checks as required under 401 KAR 59:005, Section 4(4), Reference Methods 6 or 7 shall be used as applicable as described by 401 KAR 50:015 or 40 CFR 75.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

4. Specific Monitoring Requirements: (continued)

iv. Pursuant to 401 KAR 59:015, Section 7(3), sulfur dioxide or nitric oxides (nitrogen oxides), as applicable, shall be used for preparing calibration gas mixtures under Performance Specification 2 of Appendix B to 40 CFR 60, filed by reference in 401 KAR 50:015 or 40 CFR 75.

v. The span values for the continuous emission monitoring systems measuring sulfur dioxide and nitrogen oxides emissions shall be in accordance with 401 KAR 59:015, Appendix C or 40 CFR 75, Appendix A.

vi. Continuous emission monitoring data shall be converted into the units of applicable standards using the conversion procedure described in 401 KAR 59:015, Section 7(5) or 40 CFR 75.

vii. Pursuant to 401 KAR 59:015, Section 7(3), for an indirect heat exchanger that simultaneously burns fossil fuel and nonfossil fuel, the span value of all continuous monitoring systems shall be subject to the Division's approval.

viii. The permittee shall monitor the duration of a start-up.

b. The following conditions will apply prior to the Unit 2 duct tie-in (to Emission Point 03) construction phase completion, PM-CEMS installation, and WFGD start-up:

i. Pursuant to 401 KAR 59:015, Section 7, 401 KAR 59:005, Section 4, 40 CFR 60.45(a) of Subpart D, Performance Specification 1 of 40 CFR 60, Appendix B, and 401 KAR 52:020, Section 26, a continuous opacity monitoring (COM) system shall conform to requirements of these sections which include installing, calibrating, operating, and maintaining the continuous monitoring system for accurate opacity measurement. Excluding exempted time periods, if any three consecutive six-minute average opacity values exceed the opacity standard, the permittee shall, as appropriate:

(1) Accept the readout from the COM as an indicator of equipment performance and perform an inspection of the COM and/or the control equipment and make any repairs or;

(2) Within thirty (30) minutes after the third consecutive COM indicated exceedance of the opacity standard, if emissions are visible, initiate a determination of opacity using Reference Method 9. Also within thirty (30) minutes after the third consecutive COM indicated exceedance, inspect the COM and/or the control equipment, and initiate any repairs. If a Method 9 cannot be performed, the reason for not performing the test shall be documented.

ii. Pursuant to 401 KAR 52:020, Section 26, and 401 KAR 59:005, Section 4, to meet the monitoring requirement for particulate, the permittee shall use a COM. Pursuant to 40 CFR 64.4(a)(1) and the CAM plan filed 12/11/06, opacity shall be used as an indicator of particulate matter emissions. Pursuant to 40 CFR 64.4(c)(1), testing shall be conducted to establish the level of opacity that will be used as an indicator of particulate matter emissions. There may be short-term exceedances during the testing

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

4. Specific Monitoring Requirements: (continued)

period required to establish the opacity indicator level. These exceedances are not considered noncompliance periods since the testing is required to establish a permit requirement. The opacity indicator level shall be established at a level that provides reasonable assurance that particulate matter emissions are in compliance when opacity is equal to or less than the indicator level. Excluding exempted time periods:

(1) If any three (3) hour average of opacity values exceeds the opacity indicator level, the permittee shall, as appropriate, initiate an inspection of the control equipment and/or the COM system and make any repairs.

(2) If five (5) percent or greater of COM data (three (3) hour average of opacity values) recorded in a calendar quarter show excursions above the opacity indicator level, the permittee shall perform a stack test in the following calendar quarter to demonstrate compliance with the particulate standard while operating at representative conditions. The permittee shall submit a compliance test protocol as required by Section G (a)(17) of this permit before conducting the test. The Division may waive this testing requirement upon a demonstration that the cause(s) of the excursions have been corrected, or may require stack tests at any time pursuant to 401 KAR 50:045, Performance tests.

c. The following conditions will apply after the Unit 2 duct tie-in (to Emission Point 03) construction phase completion, PM-CEMS installation, and WFGD start-up:

i. Pursuant to 401 KAR 59:005, Section 4(9), to meet the monitoring requirement for particulate matter, and pursuant to 40 CFR 64.3(d) and the CAM plan filed on 12/11/06, the permittee shall use a particulate matter continuous emissions monitor (PM-CEMS). The PM-CEMS shall comply with Performance Specification 11 of Appendix B to 40 CFR 60 and ongoing quality assurance requirements per 40 CFR 60 Appendix F, Procedure 2. Compliance with the opacity standard shall be by Reference Method 9 and performed at least once every fourteen (14) boiler operating days. If a Method 9 cannot be performed the reason for not performing the test shall be documented.

ii. At any time the PM-CEMS is considered out-of-compliance and during any construction transition period requiring the recertification of the PM-CEMS, the permittee shall monitor the ESP secondary voltages and currents pursuant to 40 CFR 64.4 as submitted in the approved CAM plan. Corrective action shall be initiated when an excursion occurs outside the indicator ranges established in the approved CAM plan for these parameters.

iii. To satisfy the opacity monitor requirement of 40 CFR 60.45(a), the permittee shall relocate the old stack opacity monitor or install a new opacity monitor in the duct at a location after the ESP and before the WFGD that will meet Performance Specification 1 of 40 CFR 60, Appendix B. The permittee may be relieved of this permit condition pursuant to (72 FR 6332, February 9, 2007) 40 CFR 60.45 (b)(5) by petitioning the US EPA in writing to install a PM-CEMS as an alternative to installing the opacity monitor.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

5. Specific Recordkeeping Requirements:

a. Pursuant to 401 KAR 59:005, Section 3 (4), the owner or operator of the indirect heat exchanger shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems and devices; and all other information required by 401 KAR 59:005 recorded in a permanent form suitable for inspection.

b. Pursuant to 401 KAR 59:005, Section 3(2), the owner or operator of this unit shall maintain the records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of the affected facility, any malfunction of the air pollution control equipment; or any period during which a continuous monitoring system or monitoring device is inoperative.

c. The permittee shall maintain records of:

i. Each fuel analysis;
ii. The rate of fuel burned for each fuel type, on a daily basis;
iii. The heating value and ash content on a weekly basis;
iv. The average electrical output and the minimum and maximum hourly generation rate on a daily basis;
v. When no excess emissions have occurred and the continuous monitoring systems(s) have not been inoperative, repaired, or adjusted;
vi. Data collected either by the continuous monitoring systems or as necessary to convert monitoring data to the units of the applicable standard; and
vii. Results of all compliance tests;
viii. Percentage of the COM data (excluding exempted time periods) showing excursions above the opacity standard..

d. The permittee shall maintain records of ESP secondary voltages and currents for periods specified in the approved CAM plan and **4. c. Specific Monitoring Requirements** above and corrective actions taken. Records of these parameters shall be maintained with long-term operational records for a period of five (5) years.

e. The permittee shall keep visible observation records and Method 9 observations in a designated logbook and/or electronic format. Records shall be maintained for five (5) years.

f. The permittee shall record the duration and type (cold, warm, or hot) of a start-up.

6. Specific Reporting Requirements:

a. Pursuant to 401 KAR 59:005, Section 3 (3), minimum data requirements which follow shall be maintained and furnished in the format specified by the Division. Owners or operators of facilities required to install continuous monitoring systems, or those utilizing

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

6. Specific Reporting Requirements: (continued)

fuel sampling and analysis, shall submit for every calendar quarter a written report of excess emissions (as defined in applicable sections) to the Division. All quarterly reports shall be postmarked by the thirtieth (30th) day following the end of each calendar quarter and shall include the following information:

i. The magnitude of the excess emission computed in accordance with the 401 KAR 59:005, Section 4(8), any conversion factors used, and the date and time of commencement and completion of each time period of excess emissions.

ii. All hourly averages shall be reported for sulfur dioxide and nitrogen oxides monitors. The hourly averages shall be made available in the format specified by the Division.

iii. Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the affected facility. The nature and cause of any malfunction (if known), the corrective action taken or preventive measures adopted.

iv. The date and time identifying each period during which continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments.

v. When no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the report.

b. Pursuant to 401 KAR 59:015, Section 7(7), for the purposes of reports required under 401 KAR 59:005, Section 3(3), periods of excess emissions that shall be reported are defined as follows:

i. Excess emissions of sulfur dioxide are defined as any three (3) hour period during which the average emissions (arithmetic average of three contiguous one-hour periods) exceed the applicable sulfur dioxide emissions standards.

ii. Excess emissions for emissions units using a continuous monitoring system for measuring nitrogen oxides are defined as any three (3) hour period during which the average emissions (arithmetic average of three contiguous one hour periods) exceed the applicable nitrogen oxides emissions standards.

c. The following additional conditions will apply prior to the Unit 2 duct tie-in (to Emission Point 03) construction phase completion, PM-CEMS installation, and WFGD start-up:

i. Pursuant to 401 KAR 59:015, Section 7(7), for the purposes of reports required under 401 KAR 59:005, Section 3(3), periods of excess emissions that shall be reported are defined as follows:

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

6. Specific Reporting Requirements: (continued)

Excess emissions are defined as any six minute period during which the average opacity of emissions exceeds twenty percent opacity, except that one (1) six (6) minute average per hour of up to twenty-seven (27) percent opacity need not be reported.

ii. The permittee shall report the number of excursions (excluding startup, shut down, malfunction data) above the opacity standard, date and time of excursions, opacity value of the excursions, and percentage of the COM data showing excursions above the opacity standard in each calendar quarter.

d. The following additional conditions will apply after the Unit 2 duct tie-in (to Emission Point 03) construction phase completion, PM-CEMS installation, and WFGD start-up:

i. For particulate matter measurements, the report summary shall consist of the magnitude in actual pounds per million Btu (lb/MMBtu), rolling 3-hour average of particulate matter greater than the applicable standard for each hour of operation of the facility. Average values may be obtained by integration over the averaging period or by arithmetically averaging a minimum of four (4) equally spaced, instantaneous particulate matter measurements per hour. Any time period exempted shall be considered before determining the excess average of particulate matter.

ii. The permittee shall report the number of excursions (excluding exempted time periods) above the particulate matter standard, date and time of excursions, particulate matter value of the excursions, and percentage of the PM-CEMS data showing excursions above the applicable standard in each calendar quarter.

e. For exceedances that occur as a result of start-up, the permittee shall report:

i. The type of start-up (cold, warm, or hot);

ii. Whether or not the duration of the start-up exceeded the manufacturer's recommendation or typical, historical durations, and if so, an explanation of how the start-up exceeded recommended or typical durations.

7. Specific Control Equipment Operating Conditions:

a. The electrostatic precipitator, low nitrogen oxides burners, and wet limestone flue gas desulfurization unit shall be operated to maintain compliance with permitted emission limitations, in accordance with manufacturer's specifications and/or standard operating practices.

b. Records regarding the maintenance of the electrostatic precipitator, low nitrogen oxide burners, and wet limestone flue gas desulfurization unit shall be maintained.

c. See **Section E – Control Equipment Conditions** for further requirements.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emissions Unit: 03 (02*) - Unit 3 Indirect Heat Exchanger
* - Emission Point 02 will be redirected to Old Emission Point 03 after installation of WFGD

Description:
Unit 3 construction commenced prior to September 18, 1978.
Pulverized coal-fired unit, dry bottom, wall-fired unit with electrostatic precipitator, low nitrogen oxides burners with overfire air, and selective catalytic reduction (SCR)
Number two fuel oil used for startups and stabilization
Maximum continuous rating: 5500 MMBtu/hour.
Proposed wet limestone flue gas desulfurization (WFGD) unit to be installed between 2005 and 2010. Currently vented to Point 02, will vent to existing stack Point 03 after installation of WFGD

Control Equipment:
Electrostatic Precipitator
Low Nitrogen Oxides Burners with Overfire Air
Selective Catalytic Reduction (SCR)
Wet Limestone Flue Gas Desulfurization (WFGD) proposed for installation between 2005 and 2010

APPLICABLE REGULATIONS

401 KAR 59:015, New indirect heat exchangers of greater than 250 MMBtu/hour and commenced after August 17, 1971.
401 KAR 60:005 Section 3(b), incorporating by reference 40 CFR 60, Subpart D, Standards of performance for fossil-fuel-fired steam generators applicable for an emissions unit more than 250 MMBtu/hour and commenced after August 17, 1971.
401 KAR 52:060, Acid Rain Permits, incorporating by reference 40 CFR Parts 72 to 78, Federal Acid Rain Provisions.
401 KAR 51:160, NOx Requirements for Large Utility and Industrial Boilers, incorporating by reference 40 CFR 96.
40 CFR Part 75, Continuous Emissions Monitoring (CEM).
40 CFR Part 64, Compliance Assurance Monitoring (CAM, for PM and NOx).

1. Operating Limitations:

None

2. Emission Limitations:

a. Pursuant to 401 KAR 59:015, Section 4(1)(b) and 40 CFR 60.42(a)(1) of Subpart D, particulate emissions shall not exceed 0.10 lb/MMBtu based on a three-hour average.

b. Pursuant to 401 KAR 59:015, Section 4(2) and 40 CFR 60.42(a)(2) of Subpart D, emissions shall not exceed twenty (20) percent opacity based on a six-minute average except that a maximum of twenty-seven (27) percent opacity shall be permissible for not more than one (1) six (6) minute period in any sixty (60) consecutive minutes;

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

2. Emission Limitations: (continued)

c. Pursuant to 401 KAR 59:015, Section 4(2)(c), emissions shall not exceed twenty (20) percent opacity based on a six-minute average except for emissions from an indirect heat exchanger during building a new fire for the period required to bring the boiler up to operating conditions provided the method used is that recommended by the manufacturer and the time does not exceed the manufacturer's recommendations.

d. Pursuant to 401 KAR 59:015, Section 5(1)(b) and 40 CFR 60.43(a)(2) of Subpart D, sulfur dioxide emissions shall not exceed 1.2 lbs/MMBtu based on a three-hour average.

e. Pursuant to 401 KAR 59:015, Section 6(1)(c) and 40 CFR 60.44(a)(3) of Subpart D, nitrogen oxides emissions expressed as nitrogen dioxide shall not exceed 0.70 lb/MMBtu based on a three-hour average.

Compliance Demonstration Method:
To provide assurance that the particulate matter and visible emission limitations are being met, the permittee shall comply with **3. Testing Requirements** below. To provide assurance that the sulfur dioxide and nitrogen oxides emission limitations are being met, the permittee shall comply with **4. Specific Monitoring Requirements** below.

3. Testing Requirements:

a. Pursuant to 401 KAR 50:045, the permittee shall submit within six months of the issuance date of the final permit a schedule to conduct a performance test for particulate compliance within one year of the issuance of this permit. This requirement may be satisfied with the successful completion of particulate matter testing performed in conjunction with PM-CEMS compliance certification/recertification when approved by the Division.

b. Testing shall be conducted in accordance with 401 KAR 50:045, Performance Tests, and pursuant to 40 CFR 64.4(c)(1), the testing shall be conducted under conditions representative of maximum emissions potential under anticipated operating conditions at the pollutant-specific emissions unit.

c. In accordance with **4.b Specific Monitoring Requirements**, the permittee shall submit a schedule within six months from the date of issuance of the final permit to conduct testing within one year following the issuance of this permit to establish or re-establish the correlation between opacity and particulate emissions.

d. If no additional stack tests are performed pursuant to **4.b (ii) Specific Monitoring Requirements**, the permittee shall conduct a performance test for particulate emissions by the start of the fourth year of the term of this permit to demonstrate compliance with the applicable standard. This requirement may be satisfied with the successful completion of particulate matter testing performed in conjunction with PM-CEMS compliance certification/recertification when approved by the Division.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

3. Testing Requirements: (continued)

e. If no EPA Reference Method 9 tests are performed pursuant to **4.b.i.(2) Specific Monitoring Requirements**, then the permittee shall determine the opacity of emissions from the stack by Method 9 at least once every fourteen (14) boiler operating days, or more frequently if requested by the Division, to demonstrate compliance with the opacity standard. If no Method 9 tests are completed during the time period, the reason for not completing a test shall be documented and the permittee may use the COM system or **4.c Specific Monitoring Requirements** , when applicable, for assuring compliance with the visible emission limitation during that period.

f. After the Unit 3 duct tie-in (to Emission Point 03) construction phase completion and again after the Unit 2 duct tie-in (to Emission Point 03) construction phase completion and WFGD start-up, within sixty (60) days after achieving the maximum production rate at which the affected facilities will be operated but not later than 180 days after initial start-up of such facilities, the permittee shall conduct a performance test for particulate compliance and PM-CEMS certification/recertification on the affected facilities in accordance with 401 KAR 50:055, General Compliance Requirements.

4. Specific Monitoring Requirements:

a. The following monitoring requirements apply at all times:

i. Pursuant to 401 KAR 59:015, Section 7, and 401 KAR 59:005, Section 4 and 40 CFR 60.45(a) of Subpart D, continuous emission monitoring systems shall be installed, calibrated, maintained, and operated for measuring sulfur dioxide emissions, nitrogen oxides emissions and either oxygen or carbon dioxide emissions. The owner or operator shall ensure the continuous emission monitoring systems are in compliance with, and the owner or operator shall comply with the requirements of 401 KAR 59:005, Section 4 or 40 CFR 75.

ii. Pursuant to 401 KAR 59:015, Section 7(7), 401 KAR 59:005, Section 4, Performance Specification 2 of 40 CFR 60, Appendix B, 401 KAR 52:020, Section 26, and 40 CFR 64.3(d) and the CAM plan filed on 12/11/06, the CEMS shall be used to satisfy the monitoring and CAM requirements for Sulfur Dioxide and Nitrogen Oxides. Excluding exempted time periods, if any 3-hour average sulfur dioxide or nitrogen oxides value exceeds the standard, the permittee shall, as appropriate, initiate an investigation of the cause of the exceedances and/or the CEM system and make any repairs or take corrective action as soon as practicable.

iii. Pursuant to 401 KAR 59:015, Section 7(3), for performance evaluations of the sulfur dioxide and nitrogen oxides continuous emission monitoring system as required under 401 KAR 59:005, Section 4(3) and calibration checks as required under 401 KAR 59:005, Section 4(4), Reference Methods 6 or 7 shall be used as applicable as described by 401 KAR 50:015 or 40 CFR 75.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

4. Specific Monitoring Requirements: (continued)

iv. Pursuant to 401 KAR 59:015, Section 7(3), sulfur dioxide or nitric oxides (nitrogen oxides), as applicable, shall be used for preparing calibration gas mixtures under Performance Specification 2 of Appendix B to 40 CFR 60, filed by reference in 401 KAR 50:015 or 40 CFR 75.

v. The span values for the continuous emission monitoring systems measuring sulfur dioxide and nitrogen oxides emissions shall be in accordance with 401 KAR 59:015, Appendix C or 40 CFR 75, Appendix A.

vi. Continuous emission monitoring data shall be converted into the units of applicable standards using the conversion procedure described in 401 KAR 59:015, Section 7(5) or 40 CFR 75.

vii. Pursuant to 401 KAR 59:015, Section 7(3), for an indirect heat exchanger that simultaneously burns fossil fuel and nonfossil fuel, the span value of all continuous monitoring systems shall be subject to the Division's approval.

viii. The permittee shall monitor the duration of a start-up.

b. The following conditions will apply prior to the Unit 3 duct tie-in (to Emission Point 03) construction phase completion, PM-CEMS installation, and WFGD start-up:

i. Pursuant to 401 KAR 59:015, Section 7, 401 KAR 59:005, Section 4, 40 CFR 60.45(a) of Subpart D, Performance Specification 1 of 40 CFR 60, Appendix B, and 401 KAR 52:020, Section 26, a continuous opacity monitoring (COM) system shall conform to requirements of these sections which include installing, calibrating, operating, and maintaining the continuous monitoring system for accurate opacity measurement. Excluding exempted time periods, if any three consecutive six-minute average opacity values exceed the opacity standard, the permittee shall, as appropriate:

(1) Accept the readout from the COM as an indicator of equipment performance and perform an inspection of the COM and/or the control equipment and make any repairs or;

(2) Within thirty (30) minutes after the third consecutive COM indicated exceedance of the opacity standard, if emissions are visible, initiate a determination of opacity using Reference Method 9. Also within thirty (30) minutes after the third consecutive COM indicated exceedance, inspect the COM and/or the control equipment, and initiate any repairs. If a Method 9 cannot be performed, the reason for not performing the test shall be documented.

ii. Pursuant to 401 KAR 52:020, Section 26, and 401 KAR 59:005, Section 4, to meet the monitoring requirement for particulate, the permittee shall use a COM. Pursuant to 40 CFR 64.4(a)(1) and the CAM plan filed 12/11/06, opacity shall be used as an indicator of particulate matter emissions. Pursuant to 40 CFR 64.4(c)(1), testing shall be conducted to establish the level of opacity that will be used as an indicator of particulate matter emissions. There may be short-term exceedances during the testing

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

4. Specific Monitoring Requirements: (continued)

period required to establish the opacity indicator level. These exceedances are not considered noncompliance periods since the testing is required to establish a permit requirement. The opacity indicator level shall be established at a level that provides reasonable assurance that particulate matter emissions are in compliance when opacity is equal to or less than the indicator level. Excluding exempted time periods:

(1) If any three (3) hour average of opacity values exceeds the opacity indicator level, the permittee shall, as appropriate, initiate an inspection of the control equipment and/or the COM system and make any repairs.

(2) If five (5) percent or greater of COM data (three (3) hour average of opacity values) recorded in a calendar quarter show excursions above the opacity indicator level, the permittee shall perform a stack test in the following calendar quarter to demonstrate compliance with the particulate standard while operating at representative conditions. The permittee shall submit a compliance test protocol as required by Section G (a)(17) of this permit before conducting the test. The Division may waive this testing requirement upon a demonstration that the cause(s) of the excursions have been corrected, or may require stack tests at any time pursuant to 401 KAR 50:045, Performance tests.

c. The following conditions will apply after the Unit 3 duct tie-in (to Emission Point 03) construction phase completion, PM-CEMS installation, and WFGD start-up:

i. Pursuant to 401 KAR 59:005, Section 4(9), to meet the monitoring requirement for particulate matter, and pursuant to 40 CFR 64.3(d) and the CAM plan filed on 12/11/06, the permittee shall use a particulate matter continuous emissions monitor (PM-CEMS). The PM-CEMS shall comply with Performance Specification 11 of Appendix B to 40 CFR 60 and ongoing quality assurance requirements per 40 CFR 60 Appendix F, Procedure 2. Compliance with the opacity standard shall be by Reference Method 9 and performed at least once every fourteen (14) boiler operating days. If a Method 9 cannot be performed the reason for not performing the test shall be documented.

ii. At any time the PM-CEMS is considered out-of-compliance and during any construction transition period requiring the recertification of the PM-CEMS, the permittee shall monitor the ESP secondary voltages and currents pursuant to 40 CFR 64.4 as submitted in the approved CAM plan. Corrective action shall be initiated when an excursion occurs outside the indicator ranges established in the approved CAM plan for these parameters.

iii. To satisfy the opacity monitor requirement of 40 CFR 60.45(a), the permittee shall relocate the old stack opacity monitor or install a new opacity monitor in the duct at a location after the ESP and before the WFGD that will meet Performance Specification 1 of 40 CFR 60, Appendix B. The permittee may be relieved of this permit condition pursuant to (72 FR 6332, February 9, 2007) 40 CFR 60.45 (b)(5) by petitioning the US EPA in writing to install a PM-CEMS as an alternative to installing the opacity monitor.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

5. Specific Recordkeeping Requirements:

a. Pursuant to 401 KAR 59:005, Section 3 (4), the owner or operator of the indirect heat exchanger shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems and devices; and all other information required by 401 KAR 59:005 recorded in a permanent form suitable for inspection.

b. Pursuant to 401 KAR 59:005, Section 3(2), the owner or operator of this unit shall maintain the records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of the affected facility, any malfunction of the air pollution control equipment; or any period during which a continuous monitoring system or monitoring device is inoperative.

c. The permittee shall maintain records of:

i. Each fuel analysis;
ii. The rate of fuel burned for each fuel type, on a daily basis;
iii. The heating value and ash content on a weekly basis;
iv. The average electrical output and the minimum and maximum hourly generation rate on a daily basis;
v. When no excess emissions have occurred and the continuous monitoring systems(s) have not been inoperative, repaired, or adjusted;
vi. Data collected either by the continuous monitoring systems or as necessary to convert monitoring data to the units of the applicable standard; and
vii. Results of all compliance tests;
viii. Percentage of the COM data (excluding exempted time periods) showing excursions above the opacity standard.

d. The permittee shall maintain records of ESP secondary voltages and currents for periods specified in the approved CAM plan and **4. c. Specific Monitoring Requirements** above and corrective actions taken. Records of these parameters shall be maintained with long-term operational records for a period of five (5) years.

e. The permittee shall keep visible observation records and Method 9 observations in a designated logbook and/or electronic format. Records shall be maintained for five (5) years.

f. The permittee shall record the duration and type (cold, warm, or hot) of a start-up.

6. Specific Reporting Requirements:

a. Pursuant to 401 KAR 59:005, Section 3 (3), minimum data requirements which follow shall be maintained and furnished in the format specified by the Division. Owners or operators of facilities required to install continuous monitoring systems, or those utilizing

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

6. Specific Reporting Requirements: (continued)

fuel sampling and analysis, shall submit for every calendar quarter a written report of excess emissions (as defined in applicable sections) to the Division. All quarterly reports shall be postmarked by the thirtieth (30th) day following the end of each calendar quarter and shall include the following information:

i. The magnitude of the excess emission computed in accordance with the 401 KAR 59:005, Section 4(8), any conversion factors used, and the date and time of commencement and completion of each time period of excess emissions.

ii. All hourly averages shall be reported for sulfur dioxide and nitrogen oxides monitors. The hourly averages shall be made available in the format specified by the Division.

iii. Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the affected facility. The nature and cause of any malfunction (if known), the corrective action taken or preventive measures adopted.

iv. The date and time identifying each period during which continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments.

v. When no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the report.

b. Pursuant to 401 KAR 59:015, Section 7(7), for the purposes of reports required under 401 KAR 59:005, Section 3(3), periods of excess emissions that shall be reported are defined as follows:

i. Excess emissions of sulfur dioxide are defined as any three (3) hour period during which the average emissions (arithmetic average of three contiguous one-hour periods) exceed the applicable sulfur dioxide emissions standards.

ii. Excess emissions for emissions units using a continuous monitoring system for measuring nitrogen oxides are defined as any three (3) hour period during which the average emissions (arithmetic average of three contiguous one hour periods) exceed the applicable nitrogen oxides emissions standards.

c. The following additional conditions will apply prior to the Unit 3 duct tie-in (to Emission Point 03) construction phase completion, PM-CEMS installation, and WFGD start-up:

i. Pursuant to 401 KAR 59:015, Section 7(7), for the purposes of reports required under 401 KAR 59:005, Section 3(3), periods of excess emissions that shall be reported are defined as follows:

SECTION B – EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

6. Specific Reporting Requirements: (continued)

Excess emissions are defined as any six minute period during which the average opacity of emissions exceeds twenty percent opacity, except that one (1) six (6) minute average per hour of up to twenty-seven (27) percent opacity need not be reported.

ii. The permittee shall report the number of excursions (excluding startup, shut down, malfunction data) above the opacity standard, date and time of excursions, opacity value of the excursions, and percentage of the COM data showing excursions above the opacity standard in each calendar quarter.

d. The following additional conditions will apply after the Unit 3 duct tie-in (to Emission Point 03) construction phase completion, PM-CEMS installation, and WFGD start-up:

i. For particulate matter measurements, the report summary shall consist of the magnitude in actual pounds per million Btu (lb/MMBtu), rolling 3-hour average of particulate matter greater than the applicable standard for each hour of operation of the facility. Average values may be obtained by integration over the averaging period or by arithmetically averaging a minimum of four (4) equally spaced, instantaneous particulate matter measurements per hour. Any time period exempted shall be considered before determining the excess average of particulate matter.

ii. The permittee shall report the number of excursions (excluding exempted time periods) above the particulate matter standard, date and time of excursions, particulate matter value of the excursions, and percentage of the PM-CEMS data showing excursions above the applicable standard in each calendar quarter.

e. For exceedances that occur as a result of start-up, the permittee shall report:

i. The type of start-up (cold, warm, or hot);

ii. Whether or not the duration of the start-up exceeded the manufacturer's recommendation or typical, historical durations, and if so, an explanation of how the start-up exceeded recommended or typical durations.

7. Specific Control Equipment Operating Conditions:

a. The electrostatic precipitator, low nitrogen oxides burners, selective catalytic reduction unit, and wet limestone flue gas desulfurization unit shall be operated to maintain compliance with permitted emission limitations, in accordance with manufacturer's specifications and/or standard operating practices.

b. Records regarding the maintenance of the electrostatic precipitator, low nitrogen oxide burners, selective catalytic reduction unit, and wet limestone flue gas desulfurization unit shall be maintained.

c. See **Section E – Control Equipment Conditions** for further requirements.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emissions Unit: 04 (02*) - Unit 4 Indirect Heat Exchanger
* - Emission Point 02 will be redirected to new Emission Point 26 after installation of WFGD

Description:
Unit 4 construction commenced prior to September 18, 1978.
Pulverized coal-fired unit, dry bottom, wall-fired boiler, with electrostatic precipitator, low nitrogen oxides burners, and selective catalytic reduction (SCR).
Number two fuel oil used for startups and stabilization.
Maximum continuous rating: 5500 MMBtu/hour.
Proposed wet limestone flue gas desulfurization (WFGD) unit to be installed between 2005 and 2010. Currently vented to Point 02 will vent to a new stack Point 26 after installation of WFGD.

Control Equipment:
Electrostatic Precipitator
Low Nitrogen Oxides Burners with Overfire Air
Selective Catalytic Reduction (SCR)
Wet Limestone Flue Gas Desulfurization (WFGD) proposed for installation between 2005 and 2010

APPLICABLE REGULATIONS

401 KAR 59:015, New indirect heat exchangers of greater than 250 MMBtu/hour and commenced after August 17, 1971.
401 KAR 60:005 Section 3(b), incorporating by reference 40 CFR 60, Subpart D, Standards of performance for fossil-fuel-fired steam generators applicable for an emissions unit more than 250 MMBtu/hour and commenced after August 17, 1971.
401 KAR 52:060, Acid Rain Permits, incorporating by reference 40 CFR Parts 72 to 78, Federal Acid Rain Provisions.
401 KAR 51:160, NOx Requirements for Large Utility and Industrial Boilers, incorporating by reference 40 CFR 96.
40 CFR Part 75, Continuous Emissions Monitoring (CEM).
40 CFR Part 64, Compliance Assurance Monitoring (CAM, for PM and NOx).

1. Operating Limitations:
None

2. Emission Limitations:

a. Pursuant to 401 KAR 59:015, Section 4(1)(b) and 40 CFR 60.42(a)(1) of Subpart D, particulate emissions shall not exceed 0.10 lb/MMBtu based on a three-hour average.

b. Pursuant to 401 KAR 59:015, Section 4(2) and 40 CFR 60.42(a)(2) of Subpart D, emissions shall not exceed twenty (20) percent opacity based on a six-minute average except that a maximum of twenty-seven (27) percent opacity shall be permissible for not more than one (1) six (6) minute period in any sixty (60) consecutive minutes;

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

2. Emission Limitations: (continued)

c. Pursuant to 401 KAR 59:015, Section 4(2)(c), emissions shall not exceed twenty (20) percent opacity based on a six-minute average except for emissions from an indirect heat exchanger during building a new fire for the period required to bring the boiler up to operating conditions provided the method used is that recommended by the manufacturer and the time does not exceed the manufacturer's recommendations.

d. Pursuant to 401 KAR 59:015, Section 5(1)(b) and 40 CFR 60.43(a)(2) of Subpart D, sulfur dioxide emissions shall not exceed 1.2 lbs/MMBtu based on a three-hour average.

e. Pursuant to 401 KAR 59:015, Section 6(1)(c) and 40 CFR 60.44(a)(3) of Subpart D, nitrogen oxides emissions expressed as nitrogen dioxide shall not exceed 0.70 lb/MMBtu based on a three-hour average.

Compliance Demonstration Method:
To provide assurance that the particulate matter and visible emission limitations are being met, the permittee shall comply with **3. Testing Requirements** below. To provide assurance that the sulfur dioxide and nitrogen oxides emission limitations are being met, the permittee shall comply with **4. Specific Monitoring Requirements** below.

3. Testing Requirements:

a. Pursuant to 401 KAR 50:045, the permittee shall submit within six months of the issuance date of the final permit a schedule to conduct a performance test for particulate compliance within one year of the issuance of this permit. This requirement may be satisfied with the successful completion of particulate matter testing performed in conjunction with PM-CEMS compliance certification/recertification when approved by the Division.

b. Testing shall be conducted in accordance with 401 KAR 50:045, Performance Tests, and pursuant to 40 CFR 64.4(c)(1), the testing shall be conducted under conditions representative of maximum emissions potential under anticipated operating conditions at the pollutant-specific emissions unit.

c. In accordance with **4.b Specific Monitoring Requirements**, the permittee shall submit a schedule within six months from the date of issuance of the final permit to conduct testing within one year following the issuance of this permit to establish or re-establish the correlation between opacity and particulate emissions.

d. If no additional stack tests are performed pursuant to **4.b (ii) Specific Monitoring Requirements**, the permittee shall conduct a performance test for particulate emissions by the start of the fourth year of the term of this permit to demonstrate compliance with the applicable standard. This requirement may be satisfied with the successful completion of particulate matter testing performed in conjunction with PM-CEMS compliance certification/recertification when approved by the Division.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

3. Testing Requirements: (continued)

e. If no EPA Reference Method 9 tests are performed pursuant to **4.b.i.(2) Specific Monitoring Requirements**, then the permittee shall determine the opacity of emissions from the stack by Method 9 at least once every fourteen (14) boiler operating days, or more frequently if requested by the Division, to demonstrate compliance with the opacity standard. If no Method 9 tests are completed during the time period, the reason for not completing a test shall be documented and the permittee may use the COM system or **4.c Specific Monitoring Requirements** , when applicable, for assuring compliance with the visible emission limitation during that period.

f. After the Unit 3 duct tie-in (to Emission Point 03) construction phase completion and again after the Unit 4 duct tie-in (to Emission Point 26) construction phase completion and WFGD start-up, within sixty (60) days after achieving the maximum production rate at which the affected facilities will be operated but not later than 180 days after initial start-up of such facilities, the permittee shall conduct a performance test for particulate compliance and PM-CEMS certification/recertification on the affected facilities in accordance with 401 KAR 50:055, General Compliance Requirements.

4. Specific Monitoring Requirements:

a. The following monitoring requirements apply at all times:

i. Pursuant to 401 KAR 59:015, Section 7, and 401 KAR 59:005, Section 4 and 40 CFR 60.45(a) of Subpart D, continuous emission monitoring systems shall be installed, calibrated, maintained, and operated for measuring sulfur dioxide emissions, nitrogen oxides emissions and either oxygen or carbon dioxide emissions. The owner or operator shall ensure the continuous emission monitoring systems are in compliance with, and the owner or operator shall comply with the requirements of 401 KAR 59:005, Section 4 or 40 CFR 75.

ii. Pursuant to 401 KAR 59:015, Section 7(7), 401 KAR 59:005, Section 4, Performance Specification 2 of 40 CFR 60, Appendix B, 401 KAR 52:020, Section 26, and 40 CFR 64.3(d) and the CAM plan filed on 12/11/06, the CEMS shall be used to satisfy the monitoring and CAM requirements for Sulfur Dioxide and Nitrogen Oxides (NOx CAM applies after start-up of new SCR). Excluding exempted time periods, if any 3-hour average sulfur dioxide or nitrogen oxides value exceeds the standard, the permittee shall, as appropriate, initiate an investigation of the cause of the exceedances and/or the CEM system and make any repairs or take corrective action as soon as practicable.

iii. Pursuant to 401 KAR 59:015, Section 7(3), for performance evaluations of the sulfur dioxide and nitrogen oxides continuous emission monitoring system as required under 401 KAR 59:005, Section 4(3) and calibration checks as required under 401 KAR 59:005, Section 4(4), Reference Methods 6 or 7 shall be used as applicable as described by 401 KAR 50:015 or 40 CFR 75.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

4. Specific Monitoring Requirements: (continued)

iv. Pursuant to 401 KAR 59:015, Section 7(3), sulfur dioxide or nitric oxides (nitrogen oxides), as applicable, shall be used for preparing calibration gas mixtures under Performance Specification 2 of Appendix B to 40 CFR 60, filed by reference in 401 KAR 50:015 or 40 CFR 75.

v. The span values for the continuous emission monitoring systems measuring sulfur dioxide and nitrogen oxides emissions shall be in accordance with 401 KAR 59:015, Appendix C or 40 CFR 75, Appendix A.

vi. Continuous emission monitoring data shall be converted into the units of applicable standards using the conversion procedure described in 401 KAR 59:015, Section 7(5) or 40 CFR 75.

vii. Pursuant to 401 KAR 59:015, Section 7(3), for an indirect heat exchanger that simultaneously burns fossil fuel and nonfossil fuel, the span value of all continuous monitoring systems shall be subject to the Division's approval.

viii. The permittee shall monitor the duration of a start-up.

b. The following conditions will apply prior to the Unit 4 duct tie-in (to Emission Point 26) construction phase completion, PM-CEMS installation, and WFGD start-up:

i. Pursuant to 401 KAR 59:015, Section 7, 401 KAR 59:005, Section 4, 40 CFR 60.45(a) of Subpart D, Performance Specification 1 of 40 CFR 60, Appendix B, and 401 KAR 52:020, Section 26, a continuous opacity monitoring (COM) system shall conform to requirements of these sections which include installing, calibrating, operating, and maintaining the continuous monitoring system for accurate opacity measurement. Excluding exempted time periods, if any three consecutive six-minute average opacity values exceed the opacity standard, the permittee shall, as appropriate:

(1) Accept the readout from the COM as an indicator of equipment performance and perform an inspection of the COM and/or the control equipment and make any repairs or;

(2) Within thirty (30) minutes after the third consecutive COM indicated exceedance of the opacity standard, if emissions are visible, initiate a determination of opacity using Reference Method 9. Also within thirty (30) minutes after the third consecutive COM indicated exceedance, inspect the COM and/or the control equipment, and initiate any repairs. If a Method 9 cannot be performed, the reason for not performing the test shall be documented.

ii. Pursuant to 401 KAR 52:020, Section 26, and 401 KAR 59:005, Section 4, to meet the monitoring requirement for particulate, the permittee shall use a COM. Pursuant to 40 CFR 64.4(a)(1) and the CAM plan filed 12/11/06, opacity shall be used as an indicator of particulate matter emissions. Pursuant to 40 CFR 64.4(c)(1), testing shall be conducted to establish the level of opacity that will be used as an indicator of particulate matter emissions. There may be short-term exceedances during the testing period required to establish the opacity indicator level. These exceedances are not considered noncompliance periods since the testing is required to establish a

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

4. Specific Monitoring Requirements: (continued)

permit requirement. The opacity indicator level shall be established at a level that provides reasonable assurance that particulate matter emissions are in compliance when opacity is equal to or less than the indicator level. Excluding exempted time periods:

(1) If any three (3) hour average of opacity values exceeds the opacity indicator level, the permittee shall, as appropriate, initiate an inspection of the control equipment and/or the COM system and make any repairs.

(2) If five (5) percent or greater of COM data (three (3) hour average of opacity values) recorded in a calendar quarter show excursions above the opacity indicator level, the permittee shall perform a stack test in the following calendar quarter to demonstrate compliance with the particulate standard while operating at representative conditions. The permittee shall submit a compliance test protocol as required by Section G (a)(17) of this permit before conducting the test. The Division may waive this testing requirement upon a demonstration that the cause(s) of the excursions have been corrected, or may require stack tests at any time pursuant to 401 KAR 50:045, Performance tests.

c. The following conditions will apply after the Unit 4 duct tie-in (to Emission Point 26) construction phase completion, PM-CEMS installation, and WFGD start-up:

i. Pursuant to 401 KAR 59:005, Section 4(9), to meet the monitoring requirement for particulate matter, and pursuant to 40 CFR 64.3(d) and the CAM plan filed on 12/11/06, the permittee shall use a particulate matter continuous emissions monitor (PM-CEMS). The PM-CEMS shall comply with Performance Specification 11 of Appendix B to 40 CFR 60 and ongoing quality assurance requirements per 40 CFR 60 Appendix F, Procedure 2. Compliance with the opacity standard shall be by Reference Method 9 and performed at least once every fourteen (14) boiler operating days. If a Method 9 cannot be performed the reason for not performing the test shall be documented.

ii. At any time the PM-CEMS is out-of-compliance and during any construction transition period requiring the recertification of the PM-CEMS, the permittee shall monitor the ESP secondary voltages and currents pursuant to 40 CFR 64.4 as submitted in the approved CAM plan. Corrective action shall be initiated when an excursion occurs outside the indicator ranges established in the approved CAM plan for these parameters.

iii. To satisfy the opacity monitor requirement of 40 CFR 60.45(a), the permittee shall relocate the old stack opacity monitor or install a new opacity monitor in the duct at a location after the ESP and before the WFGD that will meet Performance Specification 1 of 40 CFR 60, Appendix B. The permittee may be relieved of this permit condition pursuant to (72 FR 6332, February 9, 2007) 40 CFR 60.45 (b)(5) by petitioning the US EPA in writing to install a PM-CEMS as an alternative to installing the opacity monitor.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

5. Specific Recordkeeping Requirements:

a. Pursuant to 401 KAR 59:005, Section 3 (4), the owner or operator of the indirect heat exchanger shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems and devices; and all other information required by 401 KAR 59:005 recorded in a permanent form suitable for inspection.

b. Pursuant to 401 KAR 59:005, Section 3(2), the owner or operator of this unit shall maintain the records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of the affected facility, any malfunction of the air pollution control equipment; or any period during which a continuous monitoring system or monitoring device is inoperative.

c. The permittee shall maintain records of:

i. Each fuel analysis;
ii. The rate of fuel burned for each fuel type, on a daily basis;
iii. The heating value and ash content on a weekly basis;
iv. The average electrical output and the minimum and maximum hourly generation rate on a daily basis;
v. When no excess emissions have occurred and the continuous monitoring systems(s) have not been inoperative, repaired, or adjusted;
vi. Data collected either by the continuous monitoring systems or as necessary to convert monitoring data to the units of the applicable standard; and
vii. Results of all compliance tests;
viii. Percentage of the COM data (excluding exempted time periods) showing excursions above the opacity standard..

d. The permittee shall maintain records of ESP secondary voltages and currents for periods specified in the approved CAM plan and **4. c. Specific Monitoring Requirements** above and corrective actions taken. Records of these parameters shall be maintained with long-term operational records for a period of five (5) years.

e. The permittee shall keep visible observation records and Method 9 observations in a designated logbook and/or electronic format. Records shall be maintained for five (5) years.

f. The permittee shall record the duration and type (cold, warm, or hot) of a start-up.

6. Specific Reporting Requirements:

a. Pursuant to 401 KAR 59:005, Section 3 (3), minimum data requirements which follow shall be maintained and furnished in the format specified by the Division. Owners or

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

6. Specific Reporting Requirements: (continued)

operators of facilities required to install continuous monitoring systems, or those utilizing fuel sampling and analysis, shall submit for every calendar quarter a written report of excess emissions (as defined in applicable sections) to the Division. All quarterly reports shall be postmarked by the thirtieth (30th) day following the end of each calendar quarter and shall include the following information:

i. The magnitude of the excess emission computed in accordance with the 401 KAR 59:005, Section 4(8), any conversion factors used, and the date and time of commencement and completion of each time period of excess emissions.

ii. All hourly averages shall be reported for sulfur dioxide and nitrogen oxides monitors. The hourly averages shall be made available in the format specified by the Division.

iii. Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the affected facility. The nature and cause of any malfunction (if known), the corrective action taken or preventive measures adopted.

iv. The date and time identifying each period during which continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments.

v. When no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the report.

b. Pursuant to 401 KAR 59:015, Section 7(7), for the purposes of reports required under 401 KAR 59:005, Section 3(3), periods of excess emissions that shall be reported are defined as follows:

i. Excess emissions of sulfur dioxide are defined as any three (3) hour period during which the average emissions (arithmetic average of three contiguous one-hour periods) exceed the applicable sulfur dioxide emissions standards.

ii. Excess emissions for emissions units using a continuous monitoring system for measuring nitrogen oxides are defined as any three (3) hour period during which the average emissions (arithmetic average of three contiguous one hour periods) exceed the applicable nitrogen oxides emissions standards.

c. The following additional conditions will apply prior to the Unit 4 duct tie-in (to Emission Point 26) construction phase completion, PM-CEMS installation, and WFGD start-up:

i. Pursuant to 401 KAR 59:015, Section 7(7), for the purposes of reports required under 401 KAR 59:005, Section 3(3), periods of excess emissions that shall be reported are defined as follows:

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

6. Specific Reporting Requirements: (continued)

Excess emissions are defined as any six minute period during which the average opacity of emissions exceeds twenty percent opacity, except that one (1) six (6) minute average per hour of up to twenty-seven (27) percent opacity need not be reported.

ii. The permittee shall report the number of excursions (excluding startup, shut down, malfunction data) above the opacity standard, date and time of excursions, opacity value of the excursions, and percentage of the COM data showing excursions above the opacity standard in each calendar quarter.

d. The following additional conditions will apply after the Unit 4 duct tie-in (to Emission Point 26) construction phase completion, PM-CEMS installation, and WFGD start-up:

i. For particulate matter measurements, the report summary shall consist of the magnitude in actual pounds per million Btu (lb/MMBtu), rolling 3-hour average of particulate matter greater than the applicable standard for each hour of operation of the facility. Average values may be obtained by integration over the averaging period or by arithmetically averaging a minimum of four (4) equally spaced, instantaneous particulate matter measurements per hour. Any time period exempted shall be considered before determining the excess average of particulate matter.

ii. The permittee shall report the number of excursions (excluding exempted time periods) above the particulate matter standard, date and time of excursions, particulate matter value of the excursions, and percentage of the PM-CEMS data showing excursions above the applicable standard in each calendar quarter.

e. For exceedances that occur as a result of start-up, the permittee shall report:

i. The type of start-up (cold, warm, or hot);

ii. Whether or not the duration of the start-up exceeded the manufacturer's recommendation or typical, historical durations, and if so, an explanation of how the start-up exceeded recommended or typical durations.

7. Specific Control Equipment Operating Conditions:

a. The electrostatic precipitator, low nitrogen oxides burners, selective catalytic unit, and wet limestone flue gas desulfurization unit shall be operated to maintain compliance with permitted emission limitations, in accordance with manufacturer's specifications and/or standard operating practices.

b. Records regarding the maintenance of the electrostatic precipitator, low nitrogen oxide burners, selective catalytic reduction unit, and wet limestone flue gas desulfurization unit shall be maintained.

c. See **Section E – Control Equipment Conditions** for further requirements.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emissions Unit: 05-01 (06) - Coal Receiving Operations
Emissions Unit: 08-01 (07) - Coal Conveying and Handling Operations
Emissions Unit: 07 (07 and 08) - Coal Handling Operations
Emissions Unit: 05-02 (10) - Limestone Handling and Receiving
Emissions Unit: 17 (12) - Limestone Handling Stockpile Operations
Emissions Unit: 25 (16) - Limestone Handling and Receiving
Emissions Unit: 27 (18) - Limestone Handling Stockpile Operations
Emissions Unit: 32 (22) - Gypsum Handling Stockpile Operations

Description:

EU 05-01 Equipment includes: Barge Unloader and Unloading Operations (Coal use)
Construction commenced: prior to November 15, 1973
Maximum Operating Rate: 3600 tons/hour
Controls: Enclosures (Barge unloader itself is not enclosed)

EU 08-01 Equipment includes: Conveyors 1A, 1B, 1C, and transfer points
(From Barge Unloader thru Transfer House 1 to Sample House)
Construction commenced: before October 24, 1974
Maximum Operating Rate: 3600 tons/hour, each
Controls: Enclosures

EU 07 Equipment includes: Coal Belt Conveyors, Coal Stockpiles, and Operations Listed Below
(From Sample House to Coal Stockpiles, or Sample House thru Transfer House 4 thru Crusher House to Generating Units)
Construction commenced: before October 24, 1974

Operation	Maximum Operating Rate (Tons/hour)
Conveyors 1D, 1E, 1F and Transfer Points	3600 each
Conveyor 1J, and Transfer Points	900 each
Conveyor 1G, and Transfer Points	1500 each
Conveyors 1H, and Transfer Points	1800 each
Stockpile Operations	3600
Coal Stockpiles	3600

Controls: Enclosures, Fabric Filters, and/or Wet Suppression

EU 05-2 Equipment includes: Barge Unloader and Unloading Operations (Lime use)
Construction commenced: 1992
Maximum Operating Rate (Receiving): 1800 Tons/hour
Controls: Enclosures (Barge unloader itself is not enclosed)

EU 17 Equipment includes: Limestone Stockpile and Operations
Construction commenced: 1992
Maximum Operating Rate: 1800 Tons/hour
Controls: Wet Suppression

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Description: (continued)

EU 25 Equipment includes: Barge Unloader and Unloading Operations (New Lime use)
Construction commenced: proposed 2005 - 2010
Maximum Operating Rate (Receiving): 1000 Tons/hour
Controls: Enclosures (Barge unloader itself is not enclosed)

EU 27 Equipment includes: (LSP1) Limestone Storage Pile
Construction commenced: proposed 2005 - 2010
Maximum Operating Rate: 1000 Tons/hour
Controls: Wet Suppression

EU 32 Equipment Includes: (GSP1) Gypsum Storage Pile, (GH10) Front End Loader (GSP1 to Gypsum Conveyor 3 or Truck Loadout), and (-) Gypsum Truck Loadout
Construction commenced: Proposed 2005 - 2010
Maximum Operating Rate: 375 Tons/hour (GSP1), 750 Tons/hour (GH10 and Loadout)
Controls: Moist Material and Building Enclosure

APPLICABLE REGULATIONS:

401 KAR 63:010, Fugitive emissions is applicable to each affected facility which emits or may emit fugitive emissions and is not elsewhere subject to an opacity standard within the administrative regulations of the Division for Air Quality.

1. Operating Limitations:

None

2. Emission Limitations:

a. Pursuant to 401 KAR 63:010, Section 3, reasonable precautions shall be taken to prevent particulate matter from becoming airborne. Such reasonable precautions shall include, when applicable, but not be limited to the following:

i. Application and maintenance of asphalt, application of water, or suitable chemicals on roads, material stockpiles, and other surfaces which can create airborne dusts;

ii. Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty materials, or the use of water sprays or other measures to suppress the dust emissions during handling.

iii. Covering, at all times when in motion, open bodied trucks transporting materials likely to become airborne.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

2. Emission Limitations: (continued)

iv. The maintenance of paved roadways in a clean condition.

b. Pursuant to 401 KAR 63:010, Section 3, discharge of visible fugitive dust emissions beyond the property line is prohibited.

c. Pursuant to 401 KAR 63:010, Section 4, Additional Requirements, in addition to the requirements of Section 3 of this regulation, the following shall apply:

(1) Pursuant to 401 KAR 63:010, Section 4 (1), open bodied trucks, operating outside company property, transporting materials likely to become airborne shall be covered at all times when in motion.

(2) Pursuant to 401 KAR 63:010, Section 4 (4), no one shall allow earth or other material being transported by truck or earth moving equipment to be deposited onto a paved street or roadway.

3. Testing Requirements:

None

4. Specific Monitoring Requirements:

a. The permittee shall monitor the amount of coal received, limestone received, and gypsum processed (tonnages) monthly.

b. Visual observations shall be made on a daily weekday (Monday thru Friday) basis, of all operations and control equipment to ensure the control equipment is functioning while the associated equipment is in operation and to determine if any fugitive air emissions are being generated in such a manner as to cause a nuisance or to cross the property line. If such a condition develops, water or another wetting agent shall be applied to suppress the fugitive air emissions so as to comply with the applicable requirements of 401 KAR 63:010 as listed above.

c. In addition, visual observations shall be made on a daily weekday (Monday thru Friday) basis to determine if fugitive dust is becoming airborne from storage piles and associated operations as a result of vehicular traffic or windy conditions. If such a condition develops, water or a chemical wetting agent shall be applied to these areas as specified in 401 KAR 63:010 as listed above.

d. See Section F, Conditions 1, 2, and 3.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

5. Specific Recordkeeping Requirements:

a. The permittee shall maintain records of the coal received, limestone received, and gypsum processed (tonnages).

b. Records of daily observations and support information shall be kept in accordance with the provisions of Section F, Condition 2. See 4.b. in this subsection above.

c. A log shall be kept of all routine and non-routine maintenance performed on each control device.

d. See Section F, Conditions 1 and 2.

6. Specific Reporting Requirements:

See Section F, Conditions 5, 6, 7, and 8.

7. Specific Control Equipment Operating Conditions:

a. The air pollution control equipment (including but not limited to enclosures) shall be used to maintain compliance with applicable requirements, in accordance with manufacturer's specifications and/or standard operating practices.

b. Records regarding the maintenance of the air pollution control equipment (including but not limited to enclosures) shall be maintained.

c. See **Section E – Control Equipment Conditions** for further requirements.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emissions Unit: 06 (09) - Coal crushing operations (Crusher House #1)

Description:
Crusher #1 construction commenced: before October 24, 1974
Equipment includes: two crushers and two surge bin
Maximum Operating Rate: 1800 tons/hour

Control Equipment:
Enclosure and Baghouse

APPLICABLE REGULATIONS:

401 KAR 61:020, Existing process operations, for emissions unit commenced before July 2, 1975.
40 CFR Part 64, Compliance Assurance Monitoring (CAM, for PM).

1. Operating Limitations:

None

2. Emission Limitations:

a. Pursuant to 401 KAR 61:020, Section 3(2), particulate matter emissions into the open air shall not exceed [55 $(P)^{0.11}$ - 40] pounds per hour based on a three-hour average where P is the Process Weight Rate as defined in 401 KAR 61:020 Section 2(4), in tons per hour.

b. Pursuant to 401 KAR 61:020, Section 3(1)(a), any continuous emission(s) into the open air shall not equal or exceed forty (40) percent opacity based on a six-minute average.

3. Testing Requirements:

a. Pursuant to 40 CFR 64.4(c)(1), performance tests shall be conducted under conditions representative of maximum emissions potential under anticipated operating conditions at pollutant-specific emissions unit. Pursuant to 401 KAR 50:045, the permittee shall submit within six months of the issuance date of the final permit a schedule to conduct a performance test for particulate compliance within one year of the issuance of this permit

b. EPA Reference Method 9 performance tests shall be performed pursuant to **4.c. Specific Monitoring Requirements**, and as required by the Division to demonstrate compliance with the particulate standard.

c. EPA Reference Method 5 or Method 17 shall be performed as required by the Division to determine particulate matter concentration.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

4. Specific Monitoring Requirements:

a. The permittee shall monitor the operating rates and hours of operation on a daily basis.

b. Pursuant to 40 CFR 64.4 (a)(1) and the CAM plan filed on 12/11/06, opacity shall be used as an indicator of particulate matter emissions. The permittee shall perform a qualitative visual observation of the opacity of emissions from each stack on a daily weekday (Monday thru Friday) basis and maintain a log of the observations. If visible emissions from any stack are seen, then an inspection shall be initiated of the control equipment for any repairs.

c. Pursuant to 401 KAR 52:020, Section 26, if during qualitative visible observations visible emissions from an affected facility are seen at least once each week for two consecutive weeks, then the opacity of emissions shall be determined by EPA Reference Method 9 at least once during that two-week period while the affected facility is operating at representative capacity or at a frequency requested by the Division.

d. See Section F, Conditions 1, 2, and 3.

5. Specific Recordkeeping Requirements:

a. The permittee shall maintain records of the coal processed (tonnages) and hours of operation on a daily basis.

b. The daily log of qualitative visual observations of opacity of emissions and the opacity determined by Reference Method 9,if any were taken, and repairs that were made due to any opacity reading which exceeded the standard.

6. Specific Reporting Requirements:

a. The permittee shall report the number of excursions above the opacity standard, date and time of the excursions, and opacity value of the excursion semiannually.

b. See Section F, Conditions 5, 6, 7, and 8.

7. Specific Control Equipment Operating Conditions:

a. The enclosures and baghouse shall be used and operated to maintain compliance with permitted emission limitations, in accordance with manufacturer's specifications and/or standard operating practices.

b. Records regarding the maintenance and operation of the enclosures and baghouse shall be maintained.

c. See **Section E – Control Equipment Conditions** for further requirements.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emissions Unit: 09-01 (07) - Coal Handling and Conveying
Emissions Unit: 10-01 (07) - Coal Handling and Conveying
Emissions Unit: 11 (07 and 09) - Coal Handling and Conveying

Description:
Construction commenced before 1981 (operational in 1981),
Except, conveyors 2H and 2J construction commenced before 1977 (operational in 1977)

EU 09-01 Equipment includes: Conveyor 2H and transfer points
Maximum Operating Rate: 1800 tons/hour

EU 10-01 Equipment includes: Conveyor 6H and transfer points
Maximum Operating Rate: 1800 tons/hour

EU 11 Equipment includes: (below)

Operation	Maximum Operating Rate (Tons/hour)
Crusher House #2 (one crusher with two surge bins)	1800
Conveyors 2J, 3J, 4J, 3M, 4M and Transfer Points	900 each
Conveyors 2G, and Transfer Points	1500 each
Conveyors 5G, 6G, 7G, 8G, 3H, 4H, 5H, Coal Silo, and Transfer Points	1800 each
Conveyors 3G, 4G and Transfer Points	2400 each

Control Equipment:
Enclosures and Fabric Filter

APPLICABLE REGULATIONS:

401 KAR 60:005, Section 3(ff), which incorporates by reference 40 CFR 60.250, Subpart Y, Standards of performance for coal preparation plants, for emission units commenced after October 24, 1974.
40 CFR Part 64, Compliance Assurance Monitoring (CAM, for PM).

1. Operating Limitations:

None

2. Emission Limitations:

Pursuant to 40 CFR 60.252, the owner or operator subject to the provisions of this regulation shall not cause to be discharged into the atmosphere from any coal processing and conveying equipment, coal storage system, or transfer and loading system processing coal, gases which exhibit twenty (20) percent opacity or greater.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

3. Testing Requirements:

a. Pursuant to 40 CFR 60.254, EPA Reference Method 9 shall be used to determine opacity. EPA Reference Method 9 performance tests shall be performed pursuant to **4.c. Specific Monitoring Requirements**, and as required by the Division.

b. Pursuant to 40 CFR 64.4(c)(1), performance tests shall be conducted under conditions representative of maximum emissions potential under anticipated operating conditions at pollutant-specific emissions unit. Pursuant to 401 KAR 50:045, the permittee shall submit within six months of the issuance date of the final permit a schedule to conduct a performance test for particulate compliance within one year of the issuance of this permit

4. Specific Monitoring Requirements:

a. The permittee shall monitor the amount of coal processed (tonnage) on a monthly basis.

b. Pursuant to 40 CFR 64.4 (a)(1) and the CAM plan filed on 12/11/06, opacity shall be used as an indicator of particulate matter emissions. The permittee shall perform a qualitative visual observation of the opacity of emissions from each stack on a daily weekday (Monday thru Friday) basis and maintain a log of the observations. If visible emissions from any stack are seen, then an inspection shall be initiated of the control equipment for any repairs.

c. Pursuant to 401 KAR 52:020, Section 26, if during qualitative visible observations visible emissions from an affected facility are seen at least once each week for two consecutive weeks, then the opacity of emissions shall be determined by EPA Reference Method 9 at least once during that two-week period while the affected facility is operating at representative capacity or at a frequency requested by the Division.

d. See Section F, Conditions 1, 2, and 3.

5. Specific Recordkeeping Requirements:

a. The permittee shall maintain records of the coal processed (tonnages).

b. The permittee shall maintain records of the daily log of qualitative visual observations of opacity of emissions and the opacity determined by Reference Method 9, if any were taken, and repairs that were made due to any opacity reading which exceeded the standard.

6. Specific Reporting Requirements:

a. The permittee shall report the number of excursions above the opacity standard, date and time of the excursions, and opacity value of the excursion semiannually.

b. See Section F, Conditions 5, 6, 7, and 8.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

7. Specific Control Equipment Operating Conditions:

a. The air pollution control equipment (including but not limited to enclosures) shall be used to maintain compliance with applicable requirements, in accordance with manufacturer's specifications and/or standard operating practices.

b. Records regarding the maintenance of the air pollution control equipment (including but not limited to enclosures) shall be maintained.

c. See **Section E – Control Equipment Conditions** for further requirements.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emissions Unit: 08-02 (11) - Limestone Handling and Processing

Description:

Equipment includes: Conveyors 1A, 1B, 1C, and transfer points
(from Barge Unloader thru Transfer House 1 to Sample House)
Construction commenced: 1992
Maximum Operating Rate: 1800 Tons per hour, each

Control Equipment:

Enclosures

APPLICABLE REGULATIONS:

401 KAR 60:670, Standards of performance for nonmetallic mineral processing plants, incorporated by reference 40 CFR 60.670, Subpart OOO applies to each of the emissions units listed above, commenced after August 31, 1983.

1. Operating Limitations:

None

2. Emission Standards:

Pursuant to 401 KAR 60:670, incorporating by reference 40 CFR 60.672(b), no owner or operator shall cause to be discharged into the atmosphere from any transfer point on belt conveyors or from any other affected facility any fugitive emissions which exhibit greater than ten (10) percent opacity.

3. Testing Requirements:

a. Pursuant to 40 CFR 60.675 (c)(1), in determining compliance with the particulate standards in 401 KAR 60:670, incorporating by reference 40 CFR 60.672 (b), the owner or operator shall use USEPA Reference Method 9 and the procedures in 40 CFR 60.11 with the following additions listed from 40 CFR 60.675 (c) (1):

i. The minimum distance between the observer and the emission source shall be fifteen (15) feet.

ii. The observer shall, when possible, select a position that minimizes interference from other sources (e.g. road dust). The required observer position relative to the sun (Method 9, Section 2.1) must be followed.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

3. Testing Requirements: (continued)

iii. When a water mist due to using wet suppression is present, the observation of emissions is to be made at a point in the plume where the mist is no longer visible. The water mist is not to be considered a visible emission.

b. Reference Method 9 performance tests shall be performed pursuant to **4.c. Specific Monitoring Requirements**, and when required by the Division.

4. Specific Monitoring Requirements:

a. The permittee shall monitor the amount of limestone processed on a monthly basis.

b. The permittee shall perform a qualitative visual observation of the opacity of emissions from each affected facility on a daily weekday (Monday thru Friday) basis and maintain a log of the observations. If visible emissions from any affected facility are seen, then an inspection shall be initiated of the control equipment for any repairs.

c. Pursuant to 401 KAR 52:020, Section 26, if during qualitative visible observations visible emissions from an affected facility are seen at least once each week for two consecutive weeks, then the opacity of emissions shall be determined by EPA Reference Method 9 at least once during that two-week period while the affected facility is operating at representative capacity or at a frequency requested by the Division.

d. See Section F, Conditions 1, 2, and 3.

5. Specific Recordkeeping Requirements:

a. The permittee shall maintain records of the limestone processed (tonnages).

b. The permittee shall maintain records of the daily log of qualitative visual observations of opacity of emissions and the opacity determined by Reference Method 9,if any were taken, and repairs that were made due to any opacity reading which exceeded the standard.

6. Specific Reporting Requirements:

a. Pursuant to 401 KAR 60:670, incorporating by reference 40 CFR 60.676, the owner or operator shall submit written reports of the results of all performance tests conducted to demonstrate compliance with the standards of 40 CFR 60.672, including reports of opacity observations made using EPA Reference Method 9.

b. See Section F, Conditions 5, 6, 7, and 8.

7. Specific Control Equipment Operating Conditions:

a. The air pollution control equipment (including but not limited to enclosures) shall be used to maintain compliance with applicable requirements, in accordance with manufacturer's specifications and/or standard operating practices.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

7. Specific Control Equipment Operating Conditions: (continued)

b. Records regarding the maintenance of the air pollution control equipment (including but not limited to enclosures) shall be maintained.

c. See **Section E – Control Equipment Conditions** for further requirements.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emissions Unit: 09-02 (11) - Limestone Handling and Processing
Emissions Unit: 10-02 (11) - Limestone Handling and Processing
Emissions Unit: 12 (11) - Limestone Handling and Processing
Emissions Unit: 13 (14) - Limestone Handling and Processing
Emissions Unit: 14 (11) - Limestone Handling and Processing

Description:

Construction commenced: 1992
Controls: Fabric Filters and Enclosures

EU 09-02 Equipment includes: Conveyors 2H and transfer points
(From Sample House thru Transfer House 4 to Crusher House 1)
Operating rate: 1800 Tons per hour

EU 10-02 Equipment includes: Conveyors 6H and transfer points
(From Crusher House 1 to Crusher House 2)
Maximum Operating Rate: 1800 Tons per hour

EU 12 Equipment includes: Conveyor BF1 and transfer points
(From Crusher Houses 1 & 2 to Limestone Stockpile)
Maximum Operating Rate: 140 Tons per hour

EU 13 Equipment includes: Hammermill crushing operations
(Below Limestone Stockpile, vented through Fabric Filter to Atmosphere)
Maximum Operating Rate: 140 Tons per Hour

EU 14 Equipment includes: Conveyor L1 and transfer points
(From Limestone Stockpile to Limestone Crusher House)
Maximum Operating Rate: 140 Tons per Hour

APPLICABLE REGULATIONS:

401 KAR 60:670, Standards of performance for nonmetallic mineral processing plants, incorporated by reference 40 CFR 60.670, Subpart OOO applies to each of the emissions units listed above, commenced after August 31, 1983.
40 CFR Part 64, Compliance Assurance Monitoring (CAM, for PM).

1. Operating Limitations:

None

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

2. Emission Standards:

a. Pursuant to 401 KAR 60:670, incorporating by reference 40 CFR 60.672(a), no owner or operator shall cause to be discharged into the atmosphere from any transfer point on belt conveyors or from any other emissions unit any stack emissions which:

i. Contain particulate matter in excess of 0.05 g/dscm; and

ii. Exhibit greater than seven (7) percent opacity.

3. Testing Requirements:

a. Pursuant to 401 KAR 60:670, incorporating by reference 40 CFR 60.675 (b)(1), to determine compliance with the particulate matter standards in 40 CFR 60.672 (a), the owner or operator shall use EPA Reference Method 5 or 17 to determine particulate matter concentration and shall perform a test as required by the Division. Pursuant to 401 KAR 50:045, the permittee shall submit within six months of the issuance date of the final permit a schedule to conduct a performance test for particulate compliance within one year of the issuance of this permit

b. Pursuant to 401 KAR 60:670, incorporating by reference 40 CFR 60.675(b)(2), EPA Reference Method 9 and the procedures in 40 CFR 60.11 shall be used to determine opacity. EPA Reference Method 9 performance tests shall be performed pursuant to **4.c. Specific Monitoring Requirements**, and as required by the Division.

c. Pursuant to 40 CFR 64.4(c)(1), performance tests shall be conducted under conditions representative of maximum emissions potential under anticipated operating conditions at pollutant-specific emissions unit.

4. Specific Monitoring Requirements:

a. The permittee shall monitor the amount of limestone processed (tonnage) on a monthly basis.

b. Pursuant to 40 CFR 64.4 (a)(1) and the CAM plan filed on 12/11/06, opacity shall be used as an indicator of particulate matter emissions. The permittee shall perform a qualitative visual observation of the opacity of emissions from each stack on a daily weekday (Monday thru Friday) basis and maintain a log of the observations. If visible emissions from any stack are seen, then an inspection shall be initiated of the control equipment for any repairs.

c. Pursuant to 401 KAR 52:020, Section 26, if during qualitative visible observations visible emissions from an affected facility are seen at least once each week for two consecutive weeks, then the opacity of emissions shall be determined by EPA Reference Method 9 at least once during that two-week period while the affected facility is operating at representative capacity or at a frequency requested by the Division.

d. See Section F, Conditions 1, 2, and 3.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

5. Specific Recordkeeping Requirements:

a. The permittee shall maintain records of the limestone processed (tonnages).

b. The permittee shall maintain records of the daily log of qualitative visual observations of opacity of emissions and the opacity determined by Reference Method 9,if any were taken, and repairs that were made due to any opacity reading which exceeded the standard.

6. Specific Reporting Requirements:

a. The permittee shall report the number of excursions above the opacity standard, date and time of the excursions, and opacity value of the excursion semiannually.

b. Pursuant to 401 KAR 60:670, incorporating by reference 40 CFR 60.676, the owner and/or operator shall submit written reports of the results of all performance tests conducted to demonstrate compliance with the standards of 40 CFR 60.672, including reports of opacity observations made using EPA Reference Method 9 semiannually.

c. See Section F, Conditions 5, 6, 7, and 8.

7. Specific Control Equipment Operating Conditions:

a. Fabric filters and other applicable control equipment shall be operated to maintain compliance with permitted emission limitations, in accordance with manufacturer's specifications and/or standard operating practices.

b. Records regarding the maintenance and operation of the fabric filters and other applicable control equipment shall be maintained.

c. See **Section E – Control Equipment Conditions** for further requirements.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emissions Unit: 15 (13) - Limestone Handling Day Silo
Emissions Unit: 16 (15) - Limestone Secondary Crushing Operations

Description:
Construction commenced: 1992
Controls: Building Enclosure (Limestone Crusher Building)

EU 15 Equipment includes: Limestone day silo receiving and processing
Maximum Operating Rate: 140 Tons per hour

EU 16 Equipment includes: Two ball mills secondary crushing operations
Maximum Operating Rate: 28.6 Tons per hour, each

APPLICABLE REGULATIONS:

401 KAR 60:670, Standards of performance for nonmetallic mineral processing plants incorporated by reference 40 CFR 60.670, Subpart OOO, applies to each of the emissions units listed above, commenced after August 31, 1983.

1. Operating Limitations:
None

2. Emission Standards:

a. Pursuant to 401 KAR 60:670, incorporating by reference 40 CFR 60.672(e), if any transfer point on a conveyor belt or any other affected facility is enclosed in a building, then each enclosed affected facility must comply with emission limits in 40 CFR 60.672 (a), (b), and (c). Pursuant to 40 CFR 60.672 (c), no owner or operator shall discharge into the atmosphere from any crusher, at which a capture system is not used, fugitive emissions which exhibit greater than 15 percent opacity.

b. Pursuant to 401 KAR 60:670 Section 3(1)(b), where US EPA Reference Method 9 can not be applied for an affected facility enclosed inside a building, and pursuant to 401 KAR 60:670 Section 3(2)(c), where that same building encloses a crusher (Ball Mills), the discharge of fugitive emissions shall not exceed fifteen (15) percent opacity.

3. Testing Requirements:

a. Pursuant to 40 CFR 60.675(d) and 40 CFR 60.8, for all affected facilities located in the Limestone Crusher Building, the permittee shall use USEPA Reference Method 22 to determine fugitive emissions as required by the Division.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

3. Testing Requirements: (continued)

b. EPA Reference Method 9 observations shall be performed pursuant to **4.c. Specific Monitoring Requirements**, and as required by the Division. Opacity shall be determined, using USEPA Reference Method 9 and the procedures in 40 CFR 60.11, for each side of the building and the roof where visible emissions are observed to occur for one (1) minute or more during the respective 15 minute observation period.

4. Specific Monitoring Requirements:

a. The permittee shall monitor the amount of limestone processed (tonnage) monthly.

b. The permittee shall perform a qualitative visual observation of the opacity of emissions from each Limestone Crusher Building side on a daily weekday (Monday thru Friday) basis and maintain a log of the observations. If visible emissions from any side are seen, then an inspection shall be initiated of the control equipment for any repairs.

c. Pursuant to 401 KAR 52:020, Section 26, if during qualitative visible observations visible emissions from a building side are seen at least once each week for two consecutive weeks, then the opacity of emissions shall be determined by EPA Reference Method 9 on that side at least once during that two-week period while the affected facilities are operating at representative capacity inside the building or at a frequency requested by the Division.

d. See Section F, Conditions 1, 2, and 3.

5. Specific Recordkeeping Requirements:

a. The permittee shall maintain records of the limestone processed (tonnages).

b. The permittee shall maintain records of the daily log of qualitative visual observations of opacity of emissions and the opacity determined by Reference Method 9, if any were taken, and repairs that were made due to any opacity reading which exceeded the standard.

6. Specific Reporting Requirements:

a. Pursuant to 401 KAR 60:670, incorporating by reference 40 CFR 60.676, the owner and/or operator shall submit written reports of the results of all performance tests conducted to demonstrate compliance with the standards of 40 CFR 60.672, including reports of opacity observations made using EPA Reference Methods 9 and 22 semiannually.

b. See Section F, Conditions 5, 6, 7, and 8.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

7. Specific Control Equipment Operating Conditions:

a. The air pollution control equipment (including but not limited to enclosures) shall be used to maintain compliance with applicable requirements, in accordance with manufacturer's specifications and/or standard operating practices.

b. Records regarding the maintenance of the air pollution control equipment (including but not limited to enclosures) shall be maintained.

c. See **Section E – Control Equipment Conditions** for further requirements.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emissions Unit: 22 (-) - Two Cooling Towers

Description:

Construction commenced: prior to 1992

Tower Number	Maximum Operating Rate (Gallons per Minute)
3	172,000
4	172,000

APPLICABLE REGULATIONS:

401 KAR 63:010, Fugitive emissions is applicable to each affected facility which emits or may emit fugitive emissions and is not elsewhere subject to an opacity standard within the administrative regulations of the Division for Air Quality.

1. Operating Limitations:

None

2. Emission Limitations:

a. Pursuant to 401 KAR 63:010, Section 3, reasonable precautions shall be taken to prevent particulate matter from becoming airborne.

b. Pursuant to 401 KAR 63:010, Section 3, discharge of visible fugitive dust emissions beyond the property line is prohibited.

3. Testing Requirements:

None

4. Specific Monitoring Requirements:

See Section F, Conditions 1, 2, and 3.

5. Specific Recordkeeping Requirements:

Records of the water circulation rates shall be maintained for emissions inventory purposes.

6. Specific Reporting Requirements:

See Section F, Conditions 5, 6, 7, and 8.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emissions Unit: 26 (17) - Limestone Handling and Processing
Emissions Unit: 28 (17) - Limestone Handling and Processing
Emissions Unit: 31 (21) - Gypsum Handling and Processing
Emissions Unit: 33 (23) - Gypsum Handling and Processing

Description:

Construction commenced: Proposed 2005 – 2010
Controls: Enclosures and moist material

EU 26 Equipment includes: Conveyors L2, L3, and transfer points
Maximum Operating Rate: 1000 Tons per hour, each

EU 28 Equipment includes: Conveyors L4, L5, L6, L7, and transfer points
Maximum Operating Rate: 225 Tons per hour, each

EU 31 Equipment includes: Wet Gypsum Conveyors 1 and 2, and transfer points
Maximum Operating Rate: 375 Tons/hour

EU 33 Equipment includes: Wet Gypsum Conveyors 3, 4, and 5, and transfer points
Maximum Operating Rate: 375 Tons/hour

APPLICABLE REGULATIONS:

401 KAR 60:670, Standards of performance for nonmetallic mineral processing plants incorporating by reference 40 CFR 60.670, Subpart OOO, applies to each of the emissions units listed above, commenced after August 31, 1983.

1. Operating Limitations:

None

2. Emission Standards:

Pursuant to 401 KAR 60:670, incorporating by reference 40 CFR 60.672(b), no owner or operator shall cause to be discharged into the atmosphere from any transfer point on belt conveyors or from any other emissions unit any fugitive emissions which exhibit greater than ten (10) percent opacity.

3. Testing Requirements:

a. Pursuant to 40 CFR 60.675(c)(1) and 40 CFR 60.8, for each affected facility, within 60 days after achieving the maximum production rate which the affected facility will be operated, but not later than 180 days after initial startup following installation; the permittee shall conduct a performance test to demonstrate compliance with the

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

3. Testing Requirements: (continued)

particulate standard. Opacity shall be determined using USEPA Reference Method 9 and the procedures in 40 CFR 60.11. The duration of the Method 9 initial compliance test shall be a minimum of 1 hour (ten 6-minute averages) in length, with the following additions listed from 40 CFR 60.675 (c) (1):

i. The minimum distance between the observer and the emission source shall be fifteen (15) feet.
ii. The observer shall, when possible, select a position that minimizes interference from other sources (e.g. road dust). The required observer position relative to the sun (Method 9, Section 2.1) must be followed.

iii. When a water mist due to using wet suppression is present, the observation of emissions is to be made at a point in the plume where the mist is no longer visible. The water mist is not to be considered a visible emission.

b. Pursuant to 401 KAR 60:670, incorporating by reference 40 CFR 60.675(c), EPA Reference Method 9 and the procedures in 40 CFR 60.11 with additional procedures in 40 CFR 60.675 (c)(1) shall be used to determine opacity. EPA Reference Method 9 performance tests shall be performed pursuant to **4.c.-Specific Monitoring Requirements**, and when required by the Division.

4. Specific Monitoring Requirements:

a. The permittee shall monitor the amount of limestone and gypsum processed (tonnages) monthly.

b. The permittee shall perform a qualitative visual observation of the opacity of emissions from each affected facility on a daily weekday (Monday thru Friday) basis and maintain a log of the observations. If visible emissions from any affected facility are seen, then an inspection shall be initiated of the control equipment for any repairs.

c. Pursuant to 401 KAR 52:020, Section 26, if during qualitative visible observations visible emissions from an affected facility are seen at least once each week for two consecutive weeks, then the opacity of emissions shall be determined by EPA Reference Method 9 at least once during that two-week period while the affected facility is operating at representative capacity or at a frequency requested by the Division.

d. See Section F, Conditions 1, 2, and 3.

5. Specific Recordkeeping Requirements:

a. The permittee shall maintain records of the limestone and gypsum processed (tonnages).

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

5. Specific Recordkeeping Requirements: (continued)

b. The permittee shall maintain records of the daily log of qualitative visual observations of opacity of emissions and the opacity determined by Reference Method 9, if any were taken, and repairs that were made due to any opacity reading which exceeded the standard.

6. Specific Reporting Requirements:

a. Pursuant to 401 KAR 60:670, incorporating by reference 40 CFR 60.676, the owner and/or operator shall submit written reports of the results of all performance tests conducted to demonstrate compliance with the standards of 40 CFR 60.672, including reports of opacity observations made using EPA Reference Method 9 semiannually.

b. See Section F, Conditions 5, 6, 7, and 8.

7. Specific Control Equipment Operating Conditions:

a. The air pollution control equipment (including but not limited to enclosures) shall be used to maintain compliance with applicable requirements, in accordance with manufacturer's specifications and/or standard operating practices.

b. Records regarding the maintenance of the air pollution control equipment (including but not limited to enclosures) shall be maintained.

c. See **Section E – Control Equipment Conditions** for further requirements.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emissions Unit: 29 (19) - Limestone Handling and Processing
Emissions Unit: 30 (20) - Limestone Handling and Processing

Description:

Includes all emission points located within the Reactant Preparation Building
EU 29 Equipment includes: Wet limestone sizing screen 1 and 2, wet limestone mill 1 and 2, conveyors and transfer points.
EU 30 Equipment includes: Limestone crusher 1 and 2
Construction commenced: Proposed 2005 - 2010
Maximum Operating Rate: 100 Tons per hour, each
Controls: Building enclosure and Wet Process

APPLICABLE REGULATIONS:

401 KAR 60:670, Standards of performance for nonmetallic mineral processing plants incorporated by reference 40 CFR 60.670, Subpart OOO, applies to each of the emissions units listed above, commenced after August 31, 1983.

1. Operating Limitations:

None

2. Emission Standards:

a. Pursuant to 401 KAR 60:670, incorporating by reference 40 CFR 60.672(e), if any transfer point on a conveyor belt or any other affected facility is enclosed in a building, then each enclosed affected facility must comply with emission limits in 40 CFR 60.672 (a), (b), and (c). Pursuant to 40 CFR 60.672 (c), no owner or operator shall discharge into the atmosphere from any crusher, at which a capture system is not used, fugitive emissions which exhibit greater than 15 percent opacity.

b. Pursuant to 401 KAR 60:670 Section 3(1)(b), where US EPA Reference Method 9 can not be applied for an affected facility enclosed inside a building, and pursuant to 401 KAR 60:670 Section 3(2)(c), where that same building encloses a crusher (Limestone Crushers 1 and 2), the discharge of fugitive emissions shall not exceed fifteen (15) percent opacity.

3. Testing Requirements:

a. Pursuant to 40 CFR 675(h), initial Method 9 performance tests under 40 CFR 60.11 and 401 KAR 60:670, incorporating by reference 40 CFR 60.675 are not required for:

i. Wet screening operations and subsequent screening operations, bucket elevators, and belt conveyors that process saturated material in the production line up to, but not including the next crusher, grinding mill, or storage bin.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

3. Testing Requirements: (continued)

ii. Screening operations, bucket elevators, and belt conveyors in the production line downstream of wet milling operations, that process saturated materials up to the first crusher, grinding mill, or storage bin in the production line.

b. Pursuant to 40 CFR 60.675(d) and 40 CFR 60.8, for all other affected facilities located in the Reactant Preparation Building, within 60 days after achieving the maximum production rate which the affected facility will be operated, but not later than 180 days after initial startup following installation, the permittee shall conduct a performance test to demonstrate compliance with the particulate standard. The permittee shall use USEPA Reference Method 22 to determine fugitive emissions. The performance test shall be conducted while all emission points located inside the building are operating and shall be at least 75 minutes in duration, with each side of the building and the roof being observed for at least 15 minutes. Additionally, opacity shall be determined, using USEPA Reference Method 9 and the procedures in 40 CFR 60.11, for each side of the building and the roof where visible emissions are observed to occur for one (1) minute or more during the respective 15 minute observation period. The duration of the Method 9 observation, if needed, shall be a minimum of 1 hour (ten 6-minute averages) in length.

c. No additional Method 22 performance tests are required during the life of this permit unless requested by the Division. Additionally, Method 9 observations shall be performed pursuant to **4.c. Specific Monitoring Requirements**, and when required by the Division.

4. Specific Monitoring Requirements:

a. The permittee shall monitor the amount of limestone processed (tonnages) monthly.

b. The permittee shall perform a qualitative visual observation of the opacity of emissions from each Reactant Preparation Building side on a daily weekday (Monday thru Friday) basis and maintain a log of the observations. If visible emissions from any side are seen, then an inspection shall be initiated of the control equipment for any repairs.

c. Pursuant to 401 KAR 52:020, Section 26, if during qualitative visible observations visible emissions from a building side are seen at least once each week for two consecutive weeks, then the opacity of emissions shall be determined by EPA Reference Method 9 at least once on that side during that two-week period while the affected facilities inside are operating at representative capacity or at a frequency requested by the Division.

d. See Section F, Conditions 1, 2, and 3.

5. Specific Recordkeeping Requirements:

a. The permittee shall maintain records of the limestone processed (tonnages).

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

5. Specific Recordkeeping Requirements: (continued)

b. The permittee shall maintain records of the daily log of qualitative visual observations of opacity of emissions, fugitive emissions determined by Reference Method 22, the opacity determined by Reference Method 9,if any were taken, and repairs that were made due to any opacity reading which exceeded the standard.

6. Specific Reporting Requirements:

a. Pursuant to 401 KAR 60:670, incorporating by reference 40 CFR 60.676, the owner and/or operator shall submit written reports of the results of all performance tests conducted to demonstrate compliance with the standards of 40 CFR 60.672, including reports of opacity observations made using EPA Reference Methods 9 and 22.

b. See Section F, Conditions 5, 6, 7, and 8.

7. Specific Control Equipment Operating Conditions:

a. The air pollution control equipment (including but not limited to enclosures) shall be used to maintain compliance with applicable requirements, in accordance with manufacturer's specifications and/or standard operating practices.

b. Records regarding the maintenance of the air pollution control equipment (including but not limited to enclosures) shall be maintained.

c. See **Section E – Control Equipment Conditions** for further requirements.

SECTION C – INSIGNIFICANT ACTIVITIES

The following listed activities have been determined to be insignificant activities for this source pursuant to 401 KAR 52:020, Section 6. While these activities are designated as insignificant the permittee must comply with the applicable regulation and some minimal level of periodic monitoring may be necessary. Process and emission control equipment at each insignificant activity subject to a general applicable regulation shall be inspected monthly and qualitative visible emission evaluation made. The results of the inspections and observations shall be recorded in a log, noting color, duration, density (heavy or light), cause and any conservative actions taken for any abnormal visible emissions.

Description	Generally Applicable Regulation
1. The following fuel oil storage tanks: 525,000 gallons 100,000 gallons 20,000 gallons 12,000 gallons 1000 gallons three 500 gallon tanks two 150 gallon tanks.	None
2. 1000 gallon unleaded gasoline storage tank	401 KAR 59:050
3. The following lubricating oil storage tanks: four 15,000 gallon tanks four 11,500 gallon tanks.	None
4. Emergency electrical generator.	None
5. Sodium carbonate injection system	401 KAR 61:020
6. Infrequent evaporation of boiler cleaning solutions.	401 KAR 59:010
7. Paved and unpaved roadways	401 KAR 63:010
8. Infrequent burning of deminimis quantities of used oil for energy recovery.	
9. Cooling towers 1 and 2:	401 KAR 63:010

Tower Number	Maximum Operating Rate (Gallons per Minute)
1	191,000
2	197,000

SECTION C – INSIGNIFICANT ACTIVITIES (CONTINUED)

Description	Generally Applicable Regulations
10. G Belt extension	401 KAR 63:010
11. Limestone slurry transfer from slurry tanks to scrubbers	401 KAR 59:010
12. Gypsum storage pile	401 KAR 63:010
13. Gypsum slurry transfer from WFGD's to Vacuum Dryer (Dewatering Process)	401 KAR 59:010
14. Gypsum Vacuum Dryer (Dewatering Process)	401 KAR 59:010

SECTION D – SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS

1. As required by Section 1b of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26; compliance with annual emissions and processing limitations contained in this permit, shall be based on emissions and processing rates for any twelve (12) consecutive months.

2. PM, PM_{10}, SO_2, NO_x and visible emissions (opacity) as measured by applicable reference methods, or an equivalent or alternative method specified in 40 CFR Chapter 1, or by a test method specified in the approved state implementation plan. Compliance with the visible emissions limitations for the indirect heat exchangers (emissions unit 01, 02, 03, and 04) shall be determined using continuous opacity monitoring data, continuous particulate monitoring data, visual observations, and Reference Method 9 as applicable.

SECTION E – SOURCE CONTROL EQUIPMENT REQUIREMENTS

Pursuant to 401 KAR 50:055, Section 2(5), at all times, including periods of startup, shutdown and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Division which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

SECTION F – MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS

1. Pursuant to Section 1b (IV)1 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26, when continuing compliance is demonstrated by periodic testing or instrumental monitoring, the permittee shall compile records of required monitoring information that include:

   a. Date, place as defined in this permit, and time of sampling or measurements;
   b. Analyses performance dates;
   c. Company or entity that performed analyses;
   d. Analytical techniques or methods used;
   e. Analyses results; and
   f. Operating conditions during time of sampling or measurement.

2. Records of all required monitoring data and support information, including calibrations, maintenance records, and original strip chart recordings, and copies of all reports required by the Division for Air Quality, shall be retained by the permittee for a period of five years and shall be made available for inspection upon request by any duly authorized representative of the Division for Air Quality [Sections 1b(IV) 2 and 1a(8) of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

3. In accordance with the requirements of 401 KAR 52:020 Section 3(1)h the permittee shall allow authorized representatives of the Cabinet to perform the following during reasonable times:
   a. Enter upon the premises to inspect any facility, equipment (including air pollution control equipment), practice, or operation;
   b. To access and copy any records required by the permit:
   c. Sample or monitor, at reasonable times, substances or parameters to assure compliance with the permit or any applicable requirements.

   Reasonable times are defined as during all hours of operation, during normal office hours; or during an emergency.

4. No person shall obstruct, hamper, or interfere with any Cabinet employee or authorized representative while in the process of carrying out official duties. Refusal of entry or access may constitute grounds for permit revocation and assessment of civil penalties.

5. Summary reports of any monitoring required by this permit shall be submitted to the Regional Office listed on the front of this permit at least every six (6) months during the life of this permit, unless otherwise stated in this permit. For emission units that were still under construction or which had not commenced operation at the end of the 6-month period covered by the report and are subject to monitoring requirements in this permit, the report shall indicate that no monitoring was performed during the previous six months because the emission unit was not in operation [Sections 1b-V-1 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

SECTION F – MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS (CONTINUED)

6. The semi-annual reports are due by January 30th and July 30th of each year. All reports shall be certified by a responsible official pursuant to 401 KAR 52:020 Section 23. If continuous emission and opacity monitors are required by regulation or this permit, data shall be reported in accordance with the requirements of 401 KAR 59:005, General Provisions, Section 3(3). All deviations from permit requirements shall be clearly identified in the reports.

7. In accordance with the provisions of 401 KAR 50:055, Section 1 the owner or operator shall notify the Regional Office listed on the front of this permit concerning startups, shutdowns, or malfunctions as follows:

   a. When emissions during any planned shutdowns and ensuing startups will exceed the standards, notification shall be made no later than three (3) days before the planned shutdown, or immediately following the decision to shut down, if the shutdown is due to events which could not have been foreseen three (3) days before the shutdown.

   b. When emissions due to malfunctions, unplanned shutdowns and ensuing startups are or may be in excess of the standards, notification shall be made as promptly as possible by telephone (or other electronic media) and shall be submitted in writing upon request.

8. The owner or operator shall report emission related exceedances from permit requirements including those attributed to upset conditions (other than emission exceedances covered by Section F.7. above) to the Regional Office listed on the front of this permit within *30 days*. Other deviations from permit requirements shall *be included in the semiannual report required by Section F.6* [Section 1b (V) 3, 4. of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

9. Pursuant to 401 KAR 52:020, Permits, Section 21, the permittee shall annually certify compliance with the terms and conditions contained in this permit, by completing and returning a Compliance Certification Form (DEP 7007CC) (or an alternative approved by the regional office) to the Regional Office listed on the front of this permit and the U.S. EPA in accordance with the following requirements:

   a. Identification of the term or condition;

   b. Compliance status of each term or condition of the permit;

   c. Whether compliance was continuous or intermittent;

   d. The method used for determining the compliance status for the source, currently and over the reporting period.

   e. For an emissions unit that was still under construction or which has not commenced operation at the end of the 12-month period covered by the annual compliance certification, the permittee shall indicate that the unit is under construction and that compliance with any applicable requirements will be demonstrated within the timeframes specified in the permit.

SECTION F – MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS (CONTINUED)

f. The certification shall be postmarked by January 30th of each year. Annual compliance certifications should be mailed to the following addresses:

Division for Air Quality
Florence Regional Office
8020 Veterans Memorial Drive,
Suite 110
Florence, KY 41042

U.S. EPA Region 4
Air Enforcement Branch
Atlanta Federal Center
61 Forsyth St.
Atlanta, GA 30303-8960

Division for Air Quality
Central Files
803 Schenkel Lane
Frankfort, KY 40601

10. In accordance with 401 KAR 52:020, Section 22, the permittee shall provide the Division with all information necessary to determine its subject emissions within thirty (30) days of the date the KYEIS emission survey is mailed to the permittee.

11. Results of performance test(s) required by the permit shall be submitted to the Division by the source or its representative within forty-five days or sooner if required by an applicable standard, after the completion of the fieldwork.

SECTION G – GENERAL PROVISIONS

(a) General Compliance Requirements

1. The permittee shall comply with all conditions of this permit. Noncompliance shall be a violation of 401 KAR 52:020 and of the Clean Air Act and is grounds for enforcement action including but not limited to termination, revocation and reissuance, revision or denial of a permit [Section 1a, 3 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020 Section 26].

2. The filing of a request by the permittee for any permit revision, revocation, reissuance, or termination, or of a notification of a planned change or anticipated noncompliance, shall not stay any permit condition [Section 1a, 6 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

3. This permit may be revised, revoked, reopened and reissued, or terminated for cause in accordance with 401 KAR 52:020, Section 19. The permit will be reopened for cause and revised accordingly under the following circumstances:
   a. If additional applicable requirements become applicable to the source and the remaining permit term is three (3) years or longer. In this case, the reopening shall be completed no later than eighteen (18) months after promulgation of the applicable requirement. A reopening shall not be required if compliance with the applicable requirement is not required until after the date on which the permit is due to expire, unless this permit or any of its terms and conditions have been extended pursuant to 401 KAR 52:020, Section 12;
   b. The Cabinet or the U. S. EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements;
   c. The Cabinet or the U. S. EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit;
   d. If any additional applicable requirements of the Acid Rain Program become applicable to the source.

   Proceedings to reopen and reissue a permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of the permit for which cause to reopen exists. Reopenings shall be made as expeditiously as practicable. Reopenings shall not be initiated before a notice of intent to reopen is provided to the source by the Division, at least thirty (30) days in advance of the date the permit is to be reopened, except that the Division may provide a shorter time period in the case of an emergency.

4. The permittee shall furnish information upon request of the Cabinet to determine if cause exists for modifying, revoking and reissuing, or terminating the permit; or to determine compliance with the conditions of this permit [Section 1a, 7,8 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

5. The permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such facts or corrected information to the permitting authority [401 KAR 52:020, Section 7(1)].

SECTION G – GENERAL PROVISIONS (CONTINUED)

6. Any condition or portion of this permit which becomes suspended or is ruled invalid as a result of any legal or other action shall not invalidate any other portion or condition of this permit [Section 1a, 14 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

7. The permittee shall not use as a defense in an enforcement action the contention that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance [Section 1a, 4 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

8. Except for requirements identified in this permit as state-origin requirements, all terms and conditions shall be enforceable by the United States Environmental Protection Agency and citizens of the United States [Section 1a, 15 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

9. This permit shall be subject to suspension if the permittee fails to pay all emissions fees within 90 days after the date of notice as specified in 401 KAR 50:038, Section 3(6) [Section 1a, 10 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

10. Nothing in this permit shall alter or affect the liability of the permittee for any violation of applicable requirements prior to or at the time of permit issuance [401 KAR 52:020, Section 11(3)(b)].

11. This permit does not convey property rights or exclusive privileges [Section 1a, 9 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

12. Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by the Kentucky Cabinet for Environmental and Public Protection or any other federal, state, or local agency.

13. Nothing in this permit shall alter or affect the authority of U.S. EPA to obtain information pursuant to Federal Statute 42 USC 7414, Inspections, monitoring, and entry [401 KAR 52:020, Section 11(3)(d)].

14. Nothing in this permit shall alter or affect the authority of U.S. EPA to impose emergency orders pursuant to Federal Statute 42 USC 7603, Emergency orders [401 KAR 52:020, Section 11(3)(a)].

15. This permit consolidates the authority of any previously issued PSD, NSR, or Synthetic Minor source preconstruction permit terms and conditions for various emission units and incorporates all requirements of those existing permits into one single permit for this source.

SECTION G – GENERAL PROVISIONS (CONTINUED)

16. Pursuant to 401 KAR 52:020, Section 11, a permit shield shall not protect the owner or operator from enforcement actions for violating an applicable requirement prior to or at the time of issuance. Compliance with the conditions of a permit shall be considered compliance with:
    a. Applicable requirements that are included and specifically identified in the permit and
    b. Non-applicable requirements expressly identified in this permit.

17. Pursuant to 401 KAR 50:045, Section 2, a source required to conduct a performance test shall submit a completed Compliance Test Protocol form, DEP form 6028, or a test protocol a source has developed for submission to other regulatory agencies, in a format approved by the cabinet, to the Division's Frankfort Central Office a minimum of sixty (60) days prior to the scheduled test date. Pursuant to 401 KAR 50:045, Section 7, the Division shall be notified of the actual test date at least Thirty (30) days prior to the test.

(b) Permit Expiration and Reapplication Requirements

1. This permit shall remain in effect for a fixed term of five (5) years following the original date of issue. Permit expiration shall terminate the source's right to operate unless a timely and complete renewal application has been submitted to the Division at least six months prior to the expiration date of the permit. Upon a timely and complete submittal, the authorization to operate within the terms and conditions of this permit, including any permit shield, shall remain in effect beyond the expiration date, until the renewal permit is issued or denied by the Division [401 KAR 52:020, Section 12].

2. The authority to operate granted shall cease to apply if the source fails to submit additional information requested by the Division after the completeness determination has been made on any application, by whatever deadline the Division sets [401 KAR 52:020 Section 8(2)].

I Permit Revisions

1. A minor permit revision procedure may be used for permit revisions involving the use of economic incentive, marketable permit, emission trading, and other similar approaches, to the extent that these minor permit revision procedures are explicitly provided for in the SIP or in applicable requirements and meet the relevant requirements of 401 KAR 52:020, Section 14(2).

2. This permit is not transferable by the permittee. Future owners and operators shall obtain a new permit from the Division for Air Quality. The new permit may be processed as an administrative amendment if no other change in this permit is necessary, and provided that a written agreement containing a specific date for transfer of permit responsibility coverage and liability between the current and new permittee has been submitted to the permitting authority within ten (10) days following the transfer.

SECTION G – GENERAL PROVISIONS (CONTINUED)

(d) Construction, Start-Up, and Initial Compliance Demonstration Requirements

Pursuant to a duly submitted application the Kentucky Division for Air Quality hereby authorizes the construction of the equipment described herein, emission points EU 25, EU 26, EU 27, EU 28, EU 29, EU 30, EU 31, EU 32, EU 33, and emission point 03 staged reconfigurations in accordance with the terms and conditions of this permit.

1. Construction of any process and/or air pollution control equipment authorized by this permit shall be conducted and completed only in compliance with the conditions of this permit.

2. Within thirty (30) days following commencement of construction and within fifteen (15) days following start-up and attainment of the maximum production rate specified in the permit application, or within fifteen (15) days following the issuance date of this permit, whichever is later, the permittee shall furnish to the Regional Office listed on the front of this permit in writing, with a copy to the Division's Frankfort Central Office, notification of the following:
   a. The date when construction commenced.
   b. The date of start-up of the affected facilities listed in this permit.
   c. The date when the maximum production rate specified in the permit application was achieved.

3. Pursuant to 401 KAR 52:020, Section 3(2), unless construction is commenced within eighteen (18) months after the permit is issued, or begins but is discontinued for a period of eighteen (18) months or is not completed within a reasonable timeframe then the construction and operating authority granted by this permit for those affected facilities for which construction was not completed shall immediately become invalid. Upon written request, the Cabinet may extend these time periods if the source shows good cause.

4. For those affected facilities for which construction is authorized by this permit, a source shall be allowed to construct with the proposed permit. Operational or final permit approval is not granted by this permit until compliance with the applicable standards specified herein has been demonstrated pursuant to 401 KAR 50:055. If compliance is not demonstrated within the prescribed timeframe provided in 401 KAR 50:055, the source shall operate thereafter only for the purpose of demonstrating compliance, unless otherwise authorized by Section I of this permit or order of the Cabinet.

5. This permit shall allow time for the initial start-up, operation, and compliance demonstration of the affected facilities listed herein. However, within sixty (60) days after achieving the maximum production rate at which the affected facilities will be operated but not later than 180 days after initial start-up of such facilities, the permittee shall conduct a performance demonstration ***(test)*** on the affected facilities in accordance with 401 KAR 50:055, General compliance requirements. ***These performance tests must also be conducted in accordance with General Provisions G(d)7 of this permit and the permittee must furnish to the Division for Air Quality's Frankfort Central Office a written report of the results of such performance test.***

SECTION G – GENERAL PROVISIONS (CONTINUED)

6. Terms and conditions in this permit established pursuant to the construction authority of 401 KAR 51:017 or 401 KAR 51:052 shall not expire.

7. Pursuant to 401 KAR 50:045 Section 5 in order to demonstrate that a source is capable of complying with a standard at all times, a performance test shall be conducted under normal conditions that are representative of the source's operations and create the highest rate of emissions. If [When] the maximum production rate represents a source's highest emissions rate and a performance test is conducted at less than the maximum production rate, a source shall be limited to a production rate of no greater than 110 percent of the average production rate during the performance tests. If and when the facility is capable of operation at the rate specified in the application, the source may retest to demonstrate compliance at the new production rate. The Division for Air Quality may waive these requirement on a case-by-case basis if the source demonstrates to the Division's satisfaction that the source is in compliance with all applicable requirements.

(e) Acid Rain Program Requirements

1. If an applicable requirement of Federal Statute 42 USC 7401 through 7671q (the Clean Air Act) is more stringent than an applicable requirement promulgated pursuant to Federal Statute 42 USC 7651 through 7651o (Title IV of the Act), both provisions shall apply, and both shall be state and federally enforceable.

2. The source shall comply with all requirements and conditions of the Title IV, Acid Rain Permit contained in Section J of this document and the Phase II permit application (including the Phase II NOx compliance plan, if applicable) issued for this source. The source shall also comply with all requirements of any revised or future acid rain permit(s) issued to this source.

(f) Emergency Provisions

1. Pursuant to 401 KAR 52:020 Section 24(1), an emergency shall constitute an affirmative defense to an action brought for the noncompliance with the technology-based emission limitations if the permittee demonstrates through properly signed contemporaneous operating logs or relevant evidence that:
   a. An emergency occurred and the permittee can identify the cause of the emergency;
   b. The permitted facility was at the time being properly operated;
   c. During an emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit; and
   d. Pursuant to 401 KAR 52:020, 401 KAR 50:055, and KRS 224.01-400, the permittee notified the Division as promptly as possible and submitted written notice of the emergency to the Division when emission limitations were exceeded due to an emergency. The notice shall include a description of the emergency, steps taken to mitigate emissions, and corrective actions taken.
   e. This requirement does not relieve the source of other local, state or federal notification requirements.

SECTION G – GENERAL PROVISIONS (CONTINUED)

2. Emergency conditions listed in General Condition (f)1 above are in addition to any emergency or upset provision(s) contained in an applicable requirement [401 KAR 52:020, Section 24(3)].

3. In an enforcement proceeding, the permittee seeking to establish the occurrence of an emergency shall have the burden of proof [401 KAR 52:020, Section 24(2)].

(g) Risk Management Provisions

1. The permittee shall comply with all applicable requirements of 401 KAR Chapter 68, Chemical Accident Prevention, which incorporates by reference 40 CFR Part 68, Risk Management Plan provisions. If required, the permittee shall comply with the Risk Management Program and submit a Risk Management Plan to:

   RMP Reporting Center
   P.O. Box 1515
   Lanham-Seabrook, MD 20703-1515.

2. If requested, submit additional relevant information to the Division or the U.S. EPA.

SECTION H – ALTERNATE OPERATING SCENARIOS

None

SECTION I – COMPLIANCE SCHEDULE

None

SECTION J – ACID RAIN

TITLE IV PHASE II ACID RAIN

ACID RAIN PERMIT CONTENTS

1) Statement of Basis

2) SO_2 allowances allocated under this permit and NOx requirements for each affected unit.

3) Comments, notes and justifications regarding permit decisions and changes made to the permit application forms during the review process, and any additional requirements or conditions.

4) The permit application submitted for this source. The owners and operators of the source must comply with the standard requirements and special provisions set forth in the Phase II Application and the Phase II NOx Compliance Plan.

5) Summary of Actions

• **Statement of Basis:**

Statutory and Regulatory Authorities: In accordance with KRS 224.10-100 and Titles IV and V of the Clean Air Act, the Kentucky Environmental and Public Protection Cabinet, Division for Air Quality issues this permit pursuant to 401 KAR 52:020, Permits, 401 KAR 52:060, Acid Rain Permit, and Federal Regulation 40 CFR 76.

SECTION J – ACID RAIN (CONTINUED)

PERMIT (Conditions)

Plant Name: Kentucky Utilities Company – Ghent Station
Affected Unit: 01

1. SO_2 Allowance Allocations and NO_x Requirements for the affected unit:

SO_2 Allowances	**Year**				
	2006	2007	2008	2009	2010
Tables 2, 3 or 4 of 40 CFR 73	12,252*	12,252*	12,252*	12,252*	12,272*

NO_x Requirements	
NO_x Limits	(i) Pursuant to 40 CFR 76, the Kentucky Division for Air Quality approves the NOx emissions averaging plan for this unit. This plan is effective for calendar year 2005 through 2009. Under this plan, this unit's NOx emissions shall not exceed the annual average alternative contemporaneous emissions limitation (ACEL) of 0.45 lb/MMBtu. (ii) Under this plan, the actual Btu-weighted annual average NOx emissions rate for the units in the plan shall be less than or equal to the Btu-weighted annual average NOx emissions rate for the same units had they each been operated, during the same period of time, in compliance with the applicable emissions limitations under 40 CFR Part 76.5, 76.6, or 76.7. If the designated representative demonstrates that the requirement of condition (ii) (as set forth in 40 CFR 76.11(d)(1)(ii)(A)) is met for a year under the plan, then this unit shall be deemed to be in compliance for that year with its alternative contemporaneous annual emissions limitation set in condition (i). In addition to the described NOx compliance plan, this unit shall comply with all other applicable requirements of 40 CFR 76, including the duty to reapply for a NOx compliance plan and requirements covering excess emissions. In accordance with 40 CFR 72.40(b)(2), approval of the averaging plan shall be final only when all affected organizations have also approved this averaging plan.

* The number of allowances allocated to Phase II affected units by U. S. EPA may change under 40 CFR 73. In addition, the number of allowances actually held by an affected source in a unit may differ from the number allocated by U.S.EPA. Neither of the aforementioned conditions necessitates a revision to the unit SO_2 allowance allocations identified in this permit (See 40 CFR 72.84).

SECTION J – ACID RAIN (CONTINUED)

PERMIT (Conditions)

Plant Name: Kentucky Utilities Company – Ghent Station
Affected Unit: 02

- **SO_2 Allowance Allocations and NO_x Requirements for the affected unit:**

SO_2 Allowances	**Year**				
	2006	2007	2008	2009	2010
Tables 2, 3 or 4 of 40 CFR 73	12,737*	12,737*	12,737*	12,737*	10,038*

NO_x Requirements	
NO_x Limits	(i) Pursuant to 40 CFR 76, the Kentucky Division for Air Quality approves the NOx emissions averaging plan for this unit. This plan is effective for calendar year 2005 through 2009. Under this plan, this unit's NOx emissions shall not exceed the annual average alternative contemporaneous emissions limitation (ACEL) of 0.40 lb/MMBtu. (ii) Under this plan, the actual Btu-weighted annual average NOx emissions rate for the units in the plan shall be less than or equal to the Btu-weighted annual average NOx emissions rate for the same units had they each been operated, during the same period of time, in compliance with the applicable emissions limitations under 40 CFR Part 76.5, 76.6, or 76.7. If the designated representative demonstrates that the requirement of condition (ii) (as set forth in 40 CFR 76.11(d)(1)(ii)(A)) is met for a year under the plan, then this unit shall be deemed to be in compliance for that year with its alternative contemporaneous annual emissions limitation set in condition (i). In addition to the described NOx compliance plan, this unit shall comply with all other applicable requirements of 40 CFR 76, including the duty to reapply for a NOx compliance plan and requirements covering excess emissions. In accordance with 40 CFR 72.40(b)(2), approval of the averaging plan shall be final only when all affected organizations have also approved this averaging plan.

* The number of allowances allocated to Phase II affected units by U. S. EPA may change under 40 CFR 73. In addition, the number of allowances actually held by an affected source in a unit may differ from the number allocated by U.S.EPA. Neither of the aforementioned conditions necessitates a revision to the unit SO_2 allowance allocations identified in this permit (See 40 CFR 72.84).

SECTION J – ACID RAIN (CONTINUED)

PERMIT (Conditions)

Plant Name: Kentucky Utilities Company – Ghent Station
Affected Unit: 03

- **SO_2 Allowance Allocations and NO_x Requirements for the affected unit:**

SO_2 Allowances	**Year**				
	2006	2007	2008	2009	2010
Tables 2, 3 or 4 of 40 CFR 73	13,960*	13,960*	13,960*	13,960*	13,985*

NO_x Requirements	
NO_x Limits	(i) Pursuant to 40 CFR 76, the Kentucky Division for Air Quality approves the NOx emissions averaging plan for this unit. This plan is effective for calendar year 2005 through 2009. Under this plan, this unit's NOx emissions shall not exceed the annual average alternative contemporaneous emissions limitation (ACEL) of 0.46 lb/MMBtu. (ii) Under this plan, the actual Btu-weighted annual average NOx emissions rate for the units in the plan shall be less than or equal to the Btu-weighted annual average NOx emissions rate for the same units had they each been operated, during the same period of time, in compliance with the applicable emissions limitations under 40 CFR Part 76.5, 76.6, or 76.7. If the designated representative demonstrates that the requirement of condition (ii) (as set forth in 40 CFR 76.11(d)(1)(ii)(A)) is met for a year under the plan, then this unit shall be deemed to be in compliance for that year with its alternative contemporaneous annual emissions limitation set in condition (i). In addition to the described NOx compliance plan, this unit shall comply with all other applicable requirements of 40 CFR 76, including the duty to reapply for a NOx compliance plan and requirements covering excess emissions. In accordance with 40 CFR 72.40(b)(2), approval of the averaging plan shall be final only when all affected organizations have also approved this averaging plan.

* The number of allowances allocated to Phase II affected units by U. S. EPA may change under 40 CFR 73. In addition, the number of allowances actually held by an affected source in a unit may differ from the number allocated by U.S.EPA. Neither of the aforementioned conditions necessitates a revision to the unit SO_2 allowance allocations identified in this permit (See 40 CFR 72.84).

SECTION J – ACID RAIN (CONTINUED)

PERMIT (Conditions)

Plant Name: Kentucky Utilities Company – Ghent Station
Affected Unit: 04

- **SO_2 Allowance Allocations and NO_x Requirements for the affected unit:**

SO_2 Allowances	**Year**				
	2006	2007	2008	2009	2010
Tables 2, 3 or 4 of 40 CFR 73	13,717*	13,717*	13,717*	13,717*	13,742*

NO_x Requirements	
NO_x Limits	(i) Pursuant to 40 CFR 76, the Kentucky Division for Air Quality approves the NOx emissions averaging plan for this unit. This plan is effective for calendar year 2005 through 2009. Under this plan, this unit's NOx emissions shall not exceed the annual average alternative contemporaneous emissions limitation (ACEL) of 0.46 lb/MMBtu. (ii) Under this plan, the actual Btu-weighted annual average NOx emissions rate for the units in the plan shall be less than or equal to the Btu-weighted annual average NOx emissions rate for the same units had they each been operated, during the same period of time, in compliance with the applicable emissions limitations under 40 CFR Part 76.5, 76.6, or 76.7. If the designated representative demonstrates that the requirement of condition (ii) (as set forth in 40 CFR 76.11(d)(1)(ii)(A)) is met for a year under the plan, then this unit shall be deemed to be in compliance for that year with its alternative contemporaneous annual emissions limitation set in condition (i). In addition to the described NOx compliance plan, this unit shall comply with all other applicable requirements of 40 CFR 76, including the duty to reapply for a NOx compliance plan and requirements covering excess emissions. In accordance with 40 CFR 72.40(b)(2), approval of the averaging plan shall be final only when all affected organizations have also approved this averaging plan.

* The number of allowances allocated to Phase II affected units by U. S. EPA may change under 40 CFR 73. In addition, the number of allowances actually held by an affected source in a unit may differ from the number allocated by U.S.EPA. Neither of the aforementioned conditions necessitates a revision to the unit SO_2 allowance allocations identified in this permit (See 40 CFR 72.84).

SECTION J – ACID RAIN (CONTINUED)

2. Comments, Notes, and Justifications:

Affected units are two (2) tangentially fired and two (2) wall-fired dry-bottom boilers.

3. Permit Application: Attached

The Phase II Permit Application, the Phase II NOx Compliance Plan, and the Phase II NOx Averaging Plan are all part of this permit and the source must comply with the standard requirements and special provisions set forth in the Phase II Application, the Phase II NOx Compliance Plan, and the Phase II NOx Averaging Plan.

4. Summary of Actions:

Previous Actions:

1. Draft Phase II Permit ((# AR-96-14) including SO_2 compliance plan was issued for public comment on September 19, 1996.

2. Final Phase II Permit (# AR-96-14) including SO_2 compliance plan was issued on December 11, 1996.

3. Draft Phase II Permit (# A-98-016) was issued with the 1998 revised SO_2 allowance allocations and NOx emissions standard for public comment on December 4, 1998.

4. Final Phase II Permit (# A-98-016) was issued with the 1998 revised SO_2 allowance allocations and NOx emissions standard was issued on March 9, 1999.

5. Draft revised Title V with Acid Rain Permit (V-05-043) is being advertised for public comments.

Present Action:

1. Final Title V (V05-043) being issued with Acid Rain Permit

SECTION K – NOx BUDGET PERMIT

1) Statement of Basis

Statutory and Regulatory Authorities: In accordance with KRS 224.10-100, the Kentucky Environmental and Public Protection Cabinet issues this permit pursuant to 401 KAR 52:020 Title V permits, 401 KAR 51:160, NOx requirements for large utility and industrial boilers, and 40 CFR 97, Subpart C.

2) NO_x Budget Permit Application, Form DEP 7007EE

The original NOx Budget Permit application and Form DEP7007EE for these electrical generating units were submitted to the Division and received on October 30, 2001 and November 4, 2004, respectively. Requirements contained in that application are hereby incorporated into and made part of this NOx Budget Permit. Pursuant to 401 KAR 52:020, Section 3, the source shall operate in compliance with those requirements.

3) Comments, notes, justifications regarding permit decisions and changes made to the permit application forms during the review process, and any additional requirements or conditions.

Affected units are two (2) pulverized coal-fired, dry bottom, tangentially-fired boilers and two (2) pulverized coal-fired, dry bottom, wall-fired boilers. Each unit has a capacity to generate 25 megawatts or more of electricity, which is offered for sale. The units use coal and fuel oil as fuel source, and are authorized as base load electric generating units.

4) Summary of Actions

The NOx Budget Permit is being issued as part of this revised Title V permit for this source. Public, affected state, and U.S. EPA review will follow procedures specified in 401 KAR 52:100